

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Medina A. Ibrahim Examiner #: 77007 Date: 6/18/03
 Art Unit: 1638 Phone Number 305-5822 Serial Number: 10047825
 Mail Box and Bldg/Room Location: 9E12, 9E03 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Jan Delaval
 Reference Librarian
 Biotechnology & Chemical Library
 CM1 1E07 - 703-308-4498
 jan.delaval@uspto.gov

STAFF USE ONLY		Type of Search	Vendors and cost where applicable
Searcher:	<u>Jan</u>	NA Sequence (#):	STN _____
Searcher Phone #:	<u>41498</u>	AA Sequence (#):	Dialog _____
Searcher Location:		Structure (#):	Questel/Orbit _____
Date Searcher Picked Up:	<u>6/19/03</u>	Bibliographic:	Dr.Link _____
Date Completed:	<u>6/19/03</u>	Litigation:	Lexis/Nexis _____
Searcher Prep & Review Time:		Fulltext:	Sequence Systems _____
Clerical Prep Time:	<u>25</u>	Patent Family:	WWW/Internet _____
Online Time:	<u>+ 30</u>	Other:	Other (specify) <u>Micromfilm +</u>

WEST Search History

DATE: Thursday, June 19, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L9	(Ducick, J)[in]	1	L9
L8	peroxidase-like and ((800/279)!.CCLS.)	1	L8
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L7	peroxidase-like and ((800/279)!.CCLS.)	0	L7
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L6	peroxidase and ((800/279)!.CCLS.)	121	L6
L5	L3 and (Duvick, J)[in]	0	L5
L4	L3 and ((Duvick, J)[in])	0	L4
L3	L1 and maize	96	L3
L2	L1 and peroxidase-like	1	L2
L1	peroxidase and ((800/279)!.CCLS.)	121	L1

END OF SEARCH HISTORY

d his

(FILE 'HOME' ENTERED AT 18:46:07 ON 19 JUN 2003)

FILE 'CPLUS, BIOSIS, MEDLINE, EUROPATFULL, AGRICOLA, CAOLD, CASREACT,
CROPU, DGENE, DPCI, ENCOMPPAT2, FSTA, IFIPAT, INPADOC, JAPIO, NTIS,
PAPERCHEM2, PATDD, PATDPA, PATDPAFULL, PATOSDE, PATOSEP, PATOSWO,
PCTFULL, PCTGEN, PIRA, RAPRA, RDISCLOSURE, SYNTHLINE, ..' ENTERED AT
18:49:05 ON 19 JUN 2003

L1 53 S PEROXIDASE (W)LIKE AND (RESISTAN? OR TOLERAN?) AND MAIZE
L2 3 S L1 NOT PY>2001
L3 3609 S PEROXIDASE AND (RESISTAN? OR TOLERAN?) AND MAIZE
L4 1547 S L3 AND (TRANSGENIC OR TRANSFORM?) (2A) PLANT
L5 925 S L4 AND PATHOGEN?
L6 474 S L5 NOT PY>2001
L7 474 DUP REM L6 (0 DUPLICATES REMOVED)
L8 51 S L7 AND PEROXIDASE (2A) (GENE OR NUCLEIC (W) ACID OR NUCLEO

=> d 18 3 12 18 36

L8 ANSWER 3 OF 51 EUROPATFULL COPYRIGHT 2003 WILA

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 1018553 EUROPATFULL ED 20000723 EW 200028 FS OS
TIEN **Transgenic plants** with divergent SCaM4 or SCaM5 gene
to achieve multiple disease resistance.
TIDE Transgene Pflanzen mit divergenten SCaM-4 und SCaM-5 Genen zur
Etablierung multipler Krankheitsresistenz.
TIFR Plantes transgeniques avec les genes divergents SCaM4 et SCaM5 pour
obtenir une resistance aux maladies multiples.
IN Heo, Won-Do, 183-3, Seonin-dong, Sacheon City, Kyungsangnam-do, KR;
Cho, Moo-Je, 297-51, Sandae-dong, Jinju-city, Kyungsangnam-do, KR;
Song, Pill-Soo, 102-906, Shindonga-apartment, 756-2, Weolgae-dong,
Kwangsan-gu, Kwangju-city, KR;
Chung, Chang-Ho, 100-1003, Hyundai-apartment; 572, Hwajung-dong, Seo-gu,
Kwangju-city, KR
PA Korea Kumho Petrochemical Co. Ltd., 70, Seolin-dong, Chongno-Gu, Seoul,
KR
SO Wila-EPZ-2000-H28-T1a
DS R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;
R IT; R LI; R LU; R MC; R NL; R PT; R SE; R AL; R LT; R LV; R MK; R RO;
R SI
PIT EPA1 EUROPÄISCHE PATENTANMELDUNG
PI EP 1018553 A1 20000712
OD 20000712
AI EP 1999-300136 19990108
IC ICM C12N015-29
IC ICS C12N015-82 C12N005-10 C07K014-415 A01H005-00

L8 ANSWER 12 OF 51 DGENE (C) 2003 THOMSON DERWENT

AN AAF90225 DNA DGENE

TI Novel gene encoding peroxidase P7X protein, and its
promoter, useful for producing transgenic plants that
are resistant against nematode infections -

IN Padegimas L S; Reichert N A
PA (UMIS) UNIV MISSISSIPPI STATE.

PI WO 2001038485 A2 20010531 34p

AI WO 2000-US30159 20001124

PRAI US 1999-167229 19991124

DT Patent

LA English

OS 2001-355920 [37]

DESC Genomic walking primer used to isolate peroxidase P7X gene promoter.

L8 ANSWER 18 OF 51 PCTFULL COPYRIGHT 2003 Univentio

AN 2001038485 PCTFULL ED 20020820

TIEN NEMATODE-UPREGULATED PEROXIDASE GENE AND PROMOTER
FROM NEMATODE-RESISTANT MAIZE LINE Mp307

TIFR GENE DE PEROXYDASE A REGULATION DES NEMATODES ET PROMOTEUR TIRE D'UNE
LIGNEE DE MAIS Mp307 RESISTANT AUX NEMATODES

IN PADEGIMAS, Linas, S.;
REICHERT, Nancy, A.

PA MISSISSIPPI STATE UNIVERSITY

DT Patent

PI WO 2001038485 A2 20010531

DS W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE
DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG
KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ
PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU
ZA ZW GH GM KE LS MW MZ SD SL SZ TZ UG ZW AM AZ BY KG KZ MD

RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT
 SE TR BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
 AI WO 2000-US30159 A 20001124
 PRAI US 1999-60/167,229 19991124

 L8 ANSWER 36 OF 51 PCTFULL COPYRIGHT 2003 Univentio
 AN 1998056921 PCTFULL ED 20020514
 TIEN REGULATORY SEQUENCES FOR TRANSGENIC PLANTS
 TIFR SEQUENCES REGULATRICES POUR PLANTES TRANSGENIQUES
 IN AINLEY, Michael;
 ARMSTRONG, Katherine;
 BELMAR, Scott;
 FOLKERTS, Otto;
 HOPKINS, Nicole;
 MENKE, Michael, A.;
 PAREDDY, Dayakar;
 PETOLINO, Joseph, F.;
 SMITH, Kelley;
 WOOSLEY, Aaron
 PA DOW AGROSCIENCES LLC
 LA English
 DT Patent
 PI WO 9856921 A1 19981217
 DS W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI
 GB GE GH HU IL IS JP KE KG KR KZ LC LK LR LS LT LU LV MD MG
 MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT
 UA UG UZ YU ZW GH GM KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD
 RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT
 SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
 AI WO 1998-US11921 A 19980610
 PRAI US 1997-60/049,752 19970612
 ICM C12N015-53
 ICS C12N015-82; A01H005-00

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(FILE 'HOME' ENTERED AT 18:46:07 ON 19 JUN 2003)

FILE 'CAPLUS, BIOSIS, MEDLINE, EUROPATFULL, AGRICOLA, CAOLD, CASREACT,
 CROPU, DGENE, DPCI, ENCOMPPAT2, FSTA, IFIPAT, INPADOC, JAPIO, NTIS,
 PAPERCHEM2, PATDD, PATDPA, PATDPAFULL, PATOSDE, PATOSEP, PATOSWO,
 PCTFULL, PCTGEN, PIRA, RAPRA, RDISCLOSURE, SYNTHLINE, ...' ENTERED AT
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 L5 925 S L4 AND PATHOGEN?
 L6 474 S L5 NOT PY>2001
 L7 474 DUP REM L6 (0 DUPLICATES REMOVED)
 L8 51 S L7 AND PEROXIDASE (2A) (GENE OR NUCLEIC (W) ACID OR NUCLEO

=>

=> d all 3

L18 ANSWER 3 OF 3 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 1995:02594564 BIOTECHNO
 TI Embryogenic callus production, plant regeneration and transient gene expression following particle bombardment in the pasture grass, *Cenchrus ciliaris* (Gramineae)
 AU Ross A.H.; Manners J.M.; Birch R.G.
 CS Univ.Qld,Dept Bot., Brisbane, QLD 4072, Australia.
 SO Australian Journal of Botany, (1995), 43/2 (193-199)
 CODEN: AJBTAP ISSN: 0067-1924
 DT Journal; Article
 LA English
 CT **Cenchrus ciliaris*

=> fil biosis

FILE 'BIOSIS' ENTERED AT 13:10:24 ON 19 JUN 2003
 COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT
 FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 11 June 2003 (20030611/ED)

=> d 18 2 all

L8 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 AN 1995:354922 BIOSIS
 DN PREV199598369222
 TI Embryogenic callus production, plant regeneration and transient gene expression following particle bombardment in the pasture grass, *Cenchrus ciliaris* (Gramineae).
 AU Ross, Annette H.; Manners, John M.; Birch, Robert G. (1)
 CS (1) Dep. Botany, Univ. Queensland, Brisbane, QLD 4072 Australia
 SO Australian Journal of Botany, (1995) Vol. 43, No. 2, pp. 193-199.
 ISSN: 0067-1924.
 DT Article
 LA English
 AB Callus initiated from surface sterilised, mature seeds of **buffel grass** (*Cenchrus ciliaris* L.) gave rise to an embryogenic form when cultured on Murashige and Skoog's nutrient medium supplemented with 3% sucrose, 5% coconut water and 4 mg L-1 2,4-D. Multiple green shoots regenerated on 20% to 50% of embryogenic calli after transfer to hormone-free medium and incubation in the light. Variations in cytokinin concentration and light intensity during regeneration did not significantly increase the regeneration frequency or the number of shoots produced. Regenerated plants developed normally when transplanted to soil. A high frequency of transient expression of the beta-glucuronidase gene resulted following transfer into embryogenic callus by particle bombardment. This is a promising system for production of transformed **buffel grass** plants, if the frequency of shoot production can be increased.
 CC Genetics and Cytogenetics - Plant *03504
 Ecology; Environmental Biology - Plant *07506
 Biochemical Methods - Nucleic Acids, Purines and Pyrimidines *10052
 Biochemical Studies - General 10060
 Biochemical Studies - Carbohydrates 10068
 Nutrition - General Studies, Nutritional Status and Methods 13202
 Nutrition - Carbohydrates 13220
 Developmental Biology - Embryology - Morphogenesis, General 25508

Tissue Culture, Apparatus, Methods and Media *32500
 Plant Physiology, Biochemistry and Biophysics - Nutrition 51504
 Plant Physiology, Biochemistry and Biophysics - Growth, Differentiation *51510
 Plant Physiology, Biochemistry and Biophysics - Reproduction *51512
 Plant Physiology, Biochemistry and Biophysics - Growth Substances 51514
 Plant Physiology, Biochemistry and Biophysics - Apparatus and Methods *51524
 Agronomy - Forage Crops and Fodder *52506
 Soil Science - Fertility and Applied Studies *52807
 BC Gramineae *25305
 IT Major Concepts
 Agronomy (Agriculture); Development; Ecology (Environmental Sciences);
 Genetics; Methods and Techniques; Reproduction
 IT Chemicals & Biochemicals
 2,4-D; SUCROSE
 IT Miscellaneous Descriptors
 COCONUT WATER; CULTURE METHOD; DNA TRANSFER METHOD; GENETIC
 TRANSFORMATION; LIGHT INTENSITY; MURASHIGE AND SKOOG MEDIUM;
 REGENERATION; SHOOT PRODUCTION INCREASE; SUCROSE; TRANSPLANTING; 2,4-D
 ORGN Super Taxa
 Gramineae: Monocotyledones, Angiospermae, Spermatophyta, Plantae
 ORGN Organism Name
 Cenchrus ciliaris (Gramineae)
 ORGN Organism Superterms
 angiosperms; monocots; plants; spermatophytes; vascular plants
 RN 94-75-7 (2,4-D)
 57-50-1 (SUCROSE)

=> d his

(FILE 'HOME' ENTERED AT 12:59:48 ON 19 JUN 2003)
 SET COST OFF

FILE 'HCAPLUS' ENTERED AT 13:00:57 ON 19 JUN 2003

E ROSS A/AU

L1 88 S E3,E14,E16
 L2 1010 S ROSS A?/AU
 L3 2 S L2 AND BUFFEL
 L4 2 S L2 AND (CENCHRUS OR CILIARIS)
 L5 7 S L2 AND PEROXIDASE
 L6 1 S L5 AND L3,L4

FILE 'HCAPLUS' ENTERED AT 13:03:23 ON 19 JUN 2003

FILE 'BIOSIS' ENTERED AT 13:03:35 ON 19 JUN 2003

L7 1504 S ROSS A?/AU
 L8 2 S L7 AND (CENCHRUS OR CILIARIS OR BUFFEL GRASS)
 L9 4 S L7 AND PEROXIDASE
 L10 3 S L9 NOT L8

FILE 'MEDLINE' ENTERED AT 13:04:47 ON 19 JUN 2003

E ROSS A/AU

L11 480 S E3,E12
 L12 1240 S ROSS A?/AU
 L13 1 S L11,L12 AND (CENCHRUS OR CILIARIS OR BUFFEL OR PEROXIDASE)

FILE 'AGRICOLA' ENTERED AT 13:06:02 ON 19 JUN 2003

E ROSS A/AU

L14 163 S ROSS A?/AU
 L15 3 S L14 AND (CENCHRUS OR CILIARIS OR BUFFEL OR PEROXIDASE)

FILE 'BIOTECHDS' ENTERED AT 13:07:10 ON 19 JUN 2003
E ROSS A/AU
L16 30 S E3,E6

FILE 'BIOTECHNO' ENTERED AT 13:08:27 ON 19 JUN 2003
E ROSS A/AU
L17 253 S E3-E20
L18 3 S L17 AND (CENCHRUS OR CILIARIS OR BUFFEL OR PEROXIDASE)

FILE 'BIOTECHNO' ENTERED AT 13:10:12 ON 19 JUN 2003

FILE 'BIOSIS' ENTERED AT 13:10:24 ON 19 JUN 2003

FILE 'CROPB, CROPU' ENTERED AT 13:12:10 ON 19 JUN 2003
E ROSS A/AU
L19 13 S E3-E5

FILE 'LIFESCI' ENTERED AT 13:14:11 ON 19 JUN 2003
E ROSS A/AU
L20 203 S ROSS A?/AU
L21 0 S L20 AND (CENCHRUS OR CILIARIS OR BUFFEL OR PEROXIDASE)

Connecting via Winsock to Dialog

Logging in to Dialog

Trying 31060000009999...Open

DIALOG INFORMATION SERVICES

PLEASE LOGON:

ENTER PASSWORD:

Welcome to DIALOG

Dialog level 02.15.02D

Last logoff: 29oct02 08:54:53

Logon file001 19jun03 12:22:01

*** ANNOUNCEMENT ***

--File 581 - The 2003 annual reload of Population Demographics is complete. Please see Help News581 for details.

--File 156 - The 2003 annual reload of ToxFile is complete. Please see HELP NEWS156 for details.

--File 990 - NewsRoom now contains February 2003 to current records.

File 992 - NewsRoom 2003 archive has been newly created and contains records from January 2003. The oldest month's records roll out of File 990 and into File 992 on the first weekend of each month.

To search all 2003 records BEGIN 990, 992, or B NEWS2003, a new OneSearch category.

--Connect Time joins DialUnits as pricing options on Dialog. See HELP CONNECT for information.

--CLAIMS/US Patents (Files 340,341, 942) have been enhanced with both application and grant publication level in a single record. See HELP NEWS 340 for information.

--SourceOne patents are now delivered to your email inbox as PDF replacing TIFF delivery. See HELP SOURCE1 for more information.

--Important news for public and academic libraries. See HELP LIBRARY for more information.

--Important Notice to Freelance Authors-- See HELP FREELANCE for more information

NEW FILES RELEASED

***World News Connection (File 985)

***Dialog NewsRoom - 2003 Archive (File 992)

***TRADEMARKSCAN-Czech Republic (File 680)

***TRADEMARKSCAN-Hungary (File 681)

***TRADEMARKSCAN-Poland (File 682)

UPDATING RESUMED

RELOADED

E10 2 AU=ROSS, AILEEN D.
E11 2 AU=ROSS, AIMEE ELIZABETH
E12 1 AU=ROSS, ALAN

Enter P or PAGE for more

? e

Ref Items Index-term
E13 1 AU=ROSS, ALAN ALBERT
E14 1 AU=ROSS, ALAN HOWARD
E15 1 AU=ROSS, ALAN JOSEPH
E16 1 AU=ROSS, ALAN O.
E17 1 AU=ROSS, ALAN PAUL
E18 1 AU=ROSS, ALAN ROBERT
E19 1 AU=ROSS, ALAN STUART
E20 1 AU=ROSS, ALBERT
E21 1 AU=ROSS, ALBERT CLAYTON
E22 1 AU=ROSS, ALBERT E.
E23 1 AU=ROSS, ALBERT MATTHEW
E24 1 AU=ROSS, ALBERT PARKER, II

Enter P or PAGE for more

? e

Ref Items Index-term
E25 1 AU=ROSS, ALBERT PERRY
E26 1 AU=ROSS, ALBERTA BARKLEY
E27 1 AU=ROSS, ALBERTA KATHRYNE
E28 1 AU=ROSS, ALEX R.
E29 1 AU=ROSS, ALEXANDER
E30 1 AU=ROSS, ALICE
E31 1 AU=ROSS, ALICE MASON
E32 1 AU=ROSS, ALISON
E33 1 AU=ROSS, ALISON S.
E34 1 AU=ROSS, ALLAN D.
E35 1 AU=ROSS, ALLAN ERNEST
E36 1 AU=ROSS, ALLAN, C. M.

Enter P or PAGE for more

? e

Ref Items Index-term
E37 1 AU=ROSS, ALLEN F.
E38 1 AU=ROSS, ALLEN GARY
E39 1 AU=ROSS, ALLEN GUY PATRICK
E40 1 AU=ROSS, ALLEN PAUL
E41 1 AU=ROSS, ALONZO HARVEY, III
E42 1 AU=ROSS, ALPHA D. S.
E43 1 AU=ROSS, ALTA CATHARINE
E44 1 AU=ROSS, ALVIN JAY
E45 1 AU=ROSS, AMANDA J. LEMANCZYK
E46 1 AU=ROSS, AMELIA ANN
E47 1 AU=ROSS, AMY ELISA
E48 1 AU=ROSS, AMY J.

Enter P or PAGE for more

? e

Ref Items Index-term
E49 1 AU=ROSS, ANDREA JEANNE
E50 1 AU=ROSS, ANDREW FRANK
? e

Ref	Items	Index-term
E1	1	AU=ROSS, ANDREW FRANK
E2	1	AU=ROSS, ANDREW GLENN
E3	1	AU=ROSS, ANDREW LAWRENCE
E4	1	AU=ROSS, ANDREW MICHAEL
E5	1	AU=ROSS, ANDREW PHILLIP
E6	1	AU=ROSS, ANDREW RONALD
E7	1	AU=ROSS, ANDREW ROY SEYWARD
E8	1	AU=ROSS, ANDREW SMITH
E9	1	AU=ROSS, ANDREW T.
E10	1	AU=ROSS, ANDREW W.
E11	1	AU=ROSS, ANDREW WILLIAM
E12	1	AU=ROSS, ANDY LEE

Enter P or PAGE for more

? e

Ref	Items	Index-term
E13	1	AU=ROSS, ANGUS RODERICK
E14	1	AU=ROSS, ANITA ANN
E15	1	AU=ROSS, ANITA KATHLEEN
E16	1	AU=ROSS, ANITA NEGRIN
E17	2	AU=ROSS, ANN
E18	1	AU=ROSS, ANN AURIOL
E19	1	AU=ROSS, ANN BROWN
E20	1	AU=ROSS, ANN HELEN
E21	1	AU=ROSS, ANN MARIE
E22	1	AU=ROSS, ANN P.
E23	1	AU=ROSS, ANNA ELIZABETH
E24	1	AU=ROSS, ANNE

Enter P or PAGE for more

? e

Ref	Items	Index-term
E25	1	AU=ROSS, ANNE ELIZABETH
E26	1	AU=ROSS, ANNETTE
E27	2	AU=ROSS, ANNIE
E28	1	AU=ROSS, ANTHONY
E29	1	AU=ROSS, ANTHONY DEWAYNE
E30	1	AU=ROSS, ANTHONY FRANK
E31	1	AU=ROSS, ANTHONY FRANK, JR.
E32	1	AU=ROSS, ANTHONY ROGER
E33	1	AU=ROSS, ANTHONY THOMAS
E34	1	AU=ROSS, ARCHIBALD S.
E35	2	AU=ROSS, ARNOLD EPHRAIM
E36	1	AU=ROSS, ARNOLD LESTER, JR.

Enter P or PAGE for more

? e

Ref	Items	Index-term
E37	1	AU=ROSS, ARON
E38	1	AU=ROSS, ARON DAVID
E39	1	AU=ROSS, ARTHUR HOWARTH MACNEAL
E40	1	AU=ROSS, ARTHUR L.
E41	1	AU=ROSS, ARTHUR LARRY
E42	1	AU=ROSS, ARTHUR M.
E43	1	AU=ROSS, ARTHUR M., JR.
E44	1	AU=ROSS, ARTHUR MAX
E45	1	AU=ROSS, ARTHUR MELVIN
E46	1	AU=ROSS, ARTHUR REYNOLD, JR.
E47	1	AU=ROSS, ARTHUR WILLIAM

E48 1 AU=ROSS, B. JOHN

Enter P or PAGE for more

? s e4-e47

1 AU=ROSS, ANDREW MICHAEL
1 AU=ROSS, ANDREW PHILLIP
1 AU=ROSS, ANDREW RONALD
1 AU=ROSS, ANDREW ROY SEYWARD
1 AU=ROSS, ANDREW SMITH
1 AU=ROSS, ANDREW T.
1 AU=ROSS, ANDREW W.
1 AU=ROSS, ANDREW WILLIAM
1 AU=ROSS, ANDY LEE
1 AU=ROSS, ANGUS RODERICK
1 AU=ROSS, ANITA ANN
1 AU=ROSS, ANITA KATHLEEN
1 AU=ROSS, ANITA NEGRIN
2 AU=ROSS, ANN
1 AU=ROSS, ANN AURIOL
1 AU=ROSS, ANN BROWN
1 AU=ROSS, ANN HELEN
1 AU=ROSS, ANN MARIE
1 AU=ROSS, ANN P.
1 AU=ROSS, ANNA ELIZABETH
1 AU=ROSS, ANNE
1 AU=ROSS, ANNE ELIZABETH
1 AU=ROSS, ANNETTE
2 AU=ROSS, ANNIE
1 AU=ROSS, ANTHONY
1 AU=ROSS, ANTHONY DEWAYNE
1 AU=ROSS, ANTHONY FRANK
1 AU=ROSS, ANTHONY FRANK, JR.
1 AU=ROSS, ANTHONY ROGER
1 AU=ROSS, ANTHONY THOMAS
1 AU=ROSS, ARCHIBALD S.
2 AU=ROSS, ARNOLD EPHRAIM
1 AU=ROSS, ARNOLD LESTER, JR.
1 AU=ROSS, ARON
1 AU=ROSS, ARON DAVID
1 AU=ROSS, ARTHUR HOWARTH MACNEAL
1 AU=ROSS, ARTHUR L.
1 AU=ROSS, ARTHUR LARRY
1 AU=ROSS, ARTHUR M.
1 AU=ROSS, ARTHUR M., JR.
1 AU=ROSS, ARTHUR MAX
1 AU=ROSS, ARTHUR MELVIN
1 AU=ROSS, ARTHUR REYNOLD, JR.
1 AU=ROSS, ARTHUR WILLIAM

S1 47 E4-E47

1 AU=ROSS, ARNOLD LESTER, JR.
 1 AU=ROSS, ARON
 1 AU=ROSS, ARON DAVID
 1 AU=ROSS, ARTHUR HOWARTH MACNEAL
 1 AU=ROSS, ARTHUR L.
 1 AU=ROSS, ARTHUR LARRY
 1 AU=ROSS, ARTHUR M.
 1 AU=ROSS, ARTHUR M., JR.
 1 AU=ROSS, ARTHUR MAX
 1 AU=ROSS, ARTHUR MELVIN
 1 AU=ROSS, ARTHUR REYNOLD, JR.
 1 AU=ROSS, ARTHUR WILLIAM

S1 47 E4-E47

? ds

Set Items Description

S1 47 E4-E47

? s s1 and (cenchrus or ciliaris or buffel or grass? or peroxidase?)

47 S1
 26 CENCHRUS
 32 CILIARIS
 5 BUFFEL
 6600 GRASS?
 2468 PEROXIDASE?

S2 0 S1 AND (CENCHRUS OR CILIARIS OR BUFFEL OR GRASS? OR PEROXIDASE?)

? s s1 and (gene or genes)

47 S1
 37721 GENE
 23112 GENES

S3 0 S1 AND (GENE OR GENES)

? ds

Set Items Description

S1 47 E4-E47

S2 0 S1 AND (CENCHRUS OR CILIARIS OR BUFFEL OR GRASS? OR PEROXIDASE?)

S3 0 S1 AND (GENE OR GENES)

? t1/ti,au/all

1/TI,AU/1

DIALOG(R)File 35:(c) 2003 ProQuest Info&Learning. All rts. reserv.

Wardship to citizenship: Integrated education and Canadian Indian policy change, 1945 to 1969

Author: %%Ross, Andrew Phillip%%

1/TI,AU/2

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Queueing systems with daily cycles and stochastic demand with uncertain parameters

Author: %%Ross, Andrew Michael%%

1/TI,AU/3

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Visualisation et optimisation des effets des vac damps sur le champ vectoriel d'intensite acoustique d'une structure soumise a des impacts repetes (French text)

Author: %%Ross, Annie%%

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Deep seismic bright spots

Author: %%Ross, Andrew Ronald%%

1/TI,AU/5

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Cranial and postcranial metric variation: Regional isolation in Eastern Europe (Bosnia and Herzegovina, Croatia)

Author: %%Ross, Ann Helen%%

1/TI,AU/6

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Artistic collaboration: Choreographers and their creative partners

Author: %%Ross, Ann P.%%

1/TI,AU/7

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THERAPEUTIC MECHANISMS OF PROPYLTHIOURACIL IN THE TREATMENT OF ALCOHOLIC LIVER DISEASE

Author: %%ROSS, ARON DAVID%%

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METAL SPECIATION AND CHARACTERIZATION OF COPPER COMPLEXING LIGANDS IN SEAWATER USING ELECTROSPRAY IONIZATION MASS SPECTROMETRY (PH, 8-HYDROXYQUINOLINE)

Author: %%ROSS, ANDREW ROY SEYWARD%%

1/TI,AU/9

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EXPLORING CONNECTIONS AMONG TEACHER EMPOWERMENT, TEACHER EFFICACY, TRANSFORMATIONAL LEADERSHIP, AND STUDENT ACHIEVEMENT

Author: %%ROSS, ANTHONY THOMAS%%

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PREDICTORS FOR JUNG'S ATTITUDE TYPES OF EXTROVERSION AND INTROVERSION (CARL G. JUNG)

Author: %%ROSS, ARTHUR REYNOLD, JR.%%

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FRENCH PRONUNCIATION OF THE LATTER PART OF THE SEVENTEENTH CENTURY IN FRANCE ACCORDING TO MALARD'S TRUE FRENCH GRAMMAR

Author: %%ROSS, ANNIE%%

1/TI,AU/12

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ON INDEFINITE TERNARY NON-NULL QUADRATIC FORMS

Author: %%ROSS, ARNOLD EPHRAIM%%

1/TI,AU/13

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ON REPRESENTATION OF INTEGERS BY INDEFINITE TERNARY QUADRATIC FORMS

Author: %%ROSS, ARNOLD EPHRAIM%%

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VERSIONING WITH HYPERTEXT

Author: %%ROSS, ANDREW W.%%

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LOGISTICS PLANNING WITHIN THE SUPPLY CHAIN: A METHODOLOGY AND SOLUTION APPROACHES

Author: %%ROSS, ANTHONY DEWAYNE%%

1/TI,AU/16

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ADDING DEXTRANS (1 TO 6-ALPHA-D-GLUCANS) TO WHEAT FLOUR: EFFECTS ON FLOUR COMPONENTS, DOUGH RHEOLOGY AND END-PRODUCT QUALITY

Author: %%ROSS, ANDREW SMITH%%

1/TI,AU/17

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HAND-ME-DOWN-HEROICS: THE TRANSMISSION OF THE HEROICAL IN THE DRAMA OF THE 1570S TO THE 1590S (FARRANT THOMAS, MARLOWE CHRISTOPHER, PEELE GEORGE, GREENE ROBERT, SHAKESPEARE)

Author: %%ROSS, ANNE ELIZABETH%%

1/TI,AU/18

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SCIENCE ACHIEVEMENT IN PAPUA NEW GUINEA: MATCHING CURRICULUM DEVELOPMENT WITH ASSESSMENT STRATEGIES

Author: %%ROSS, ANGUS RODERICK%%

1/TI,AU/19

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ANGLO-SAXON TEACHING ON THE SOUL (RELIGIOUS TEACHING, AELFRIC, HOMILIES)

Author: %%ROSS, ANN BROWN%%

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CATEGORIZATION, CONCEPTUAL CONJUNCTION AND EXPERTISE: A CASE STUDY FROM CHEMISTRY

Author: %%ROSS, ANNE%%

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CHARGE DENSITIES OF DIATOMIC MOLECULES DETERMINED BY HIGH-ENERGY ELASTIC ELECTRON SCATTERING (ELECTRON DIFFRACTION)

Author: %%ROSS, ANDREW WILLIAM%%

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COGNITIVE ACCOMPANIMENTS OF THE EMOTIONS OF SADNESS, ANGER, AND GRIEF

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AN INVESTIGATION INTO THE IMPORTANCE OF THE QUANTITY AND QUALITY OF THE MOTHER-CHILD RELATIONSHIP IN PRESCHOOL CHILDREN.

Author: %%ROSS, ANNETTE%%

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BIOGENESIS OF THE ACETYLCHOLINE RECEPTOR AND ACETYLCHOLINESTERASE IN CULTURED MUSCLE CELLS

Author: %%ROSS, ANTHONY FRANK, JR.%%

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THE ARMING OF AUSTRALIA: THE POLITICS AND ADMINISTRATION OF AUSTRALIA'S SELF-CONTAINMENT STRATEGY FOR MUNITIONS SUPPLY, 1901-1945

Author: %%ROSS, ANDREW T.%%

1/TI,AU/26

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SOCIAL DOMINANCE HIERARCHIES IN CAPTIVE GROUPS OF WHITE-CROWNED SPARROWS, ZONOTRICHIA LEUCOPHRYNS LEUCOPHRYNS (STATUS DETERMINANTS, STATUS SIGNAL, AGONISTIC BEHAVIOR, INTRASPECIFIC COMPETITION, DIFFERENTIAL DISTRIBUTION)

Author: %%ROSS, ANNA ELIZABETH%%

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SECURITY AND SELF-RELIANCE: MILITARY DEPENDENCE AND CONVENTIONAL ARMS PRODUCTION IN DEVELOPING COUNTRIES

Author: %%ROSS, ANDY LEE%%

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DEANS OF STUDENTS PERCEPTIONS OF ACADEMIC INVOLVEMENT IN THE FOUR-CORNER STATES REGION (ARIZONA, COLORADO, NEW MEXICO, UTAH)

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1/TI,AU/29

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STUDIES IN THE THESSALONIAN EPISTLES IN SYRIAC

Author: %%ROSS, ARTHUR M.%%

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THE DREAMER IN THE LANDSCAPE: A CRITICAL STUDY OF EMILY BRONTE'S POETRY

Author: %%ROSS, ANN MARIE%%

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THE IMPACT OF A COMMUNICATIONS AND LEADERSHIP TRAINING PROGRAM ON ALTERING TEACHERS' PERCEPTIONS OF THEIR PRINCIPALS' TRAITS

Author: %%ROSS, ARON%%

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A DESCRIPTIVE STUDY OF DEVELOPMENTAL EDUCATION PROGRAM IMPLEMENTATION IN SELECTED ILLINOIS COMMUNITY COLLEGES

Author: %%ROSS, ARNOLD LESTER, JR.%%

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NATIONAL DEVELOPMENT AND SECTIONAL POLITICS: SOCIAL CONFLICT AND THE RISE OF A PROTEST MOVEMENT.

Author: %%ROSS, ARTHUR LARRY%%

1/TI,AU/34

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SUCCESS IN A BEHAVIORAL WEIGHT LOSS PROGRAM AS A FUNCTION OF CONTINGENCY CONTRACTING.

Author: %%ROSS, ARTHUR WILLIAM%%

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IN VIVO AND IN VITRO STUDIES OF THE GUANINE ANALOG, 6-SELENOGUANINE

Author: %%ROSS, ANTHONY FRANK%%

1/TI,AU/36

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INTELLECTUAL FUNCTIONING, DEVELOPMENTAL HISTORY, AND CLINICAL PICTURE IN PSYCHIATRIC PATIENTS WITH NORMAL EEGS AND THOSE WITH THE FOURTEEN AND SIX PER SECOND POSITIVE SPIKE EEG PATTERN.

Author: %%ROSS, ANITA NEGRIN%%

1/TI,AU/37

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ECOLOGICAL ASPECTS OF THE FOOD HABITS OF SOME INSECTIVOROUS BATS

Author: %%ROSS, ANTHONY%%

1/TI,AU/38

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ON THE RELATIONSHIP BETWEEN ANXIETY AND AGGRESSION IN NINE-YEAR-OLD BOYS

Author: %%ROSS, ANN%%

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THE APPLICATION AND USE OF PUNCHED CARDS AND INTERNATIONAL BUSINESS MACHINES IN X-RAY CRYSTAL STRUCTURE ANALYSIS

Author: %%ROSS, ARTHUR MELVIN%%

1/TI,AU/40

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QUANTUM ELECTRODYNAMICS OF NONRELATIVISTIC GASES

Author: %%ROSS, ARTHUR HOWARTH MACNEAL%%

1/TI,AU/41

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ROGER MARTIN DU GARD: PRINCIPES D'ART ET DE MORALE

Author: %%ROSS, ANITA KATHLEEN%%

1/TI,AU/42

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THE RELATION BETWEEN SOCIAL ADJUSTMENT AND ACHIEVEMENT AMONG PREADOLESCENTS

Author: %%ROSS, ANN%%

1/TI,AU/43

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THE NUCLEAR SHELL MODEL AND NUCLEAR LEVEL DENSITIES

Author: %%ROSS, ANN AURIOL%%

1/TI,AU/44

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AN INVESTIGATION OF A METHOD FOR PRE-STRESSING FLAT PLATES TO INCREASE THEIR BUCKLING STRENGTH

Author: %%ROSS, ARTHUR L.%%

1/TI,AU/45

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AGRICULTURAL LABOR AND SOCIAL LEGISLATION

Author: %%ROSS, ARTHUR MAX%%

1/TI,AU/46

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ACID HYDROLYSIS OF METHYL ACETATE IN DIOXANE - WATER MIXTURES

Author: %%ROSS, ARTHUR M., JR.%%

1/TI,AU/47

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THE PHYSICAL PROPERTIES OF CHLORINE AND OF ITS AQUEOUS SOLUTIONS WITH A
VIEW TO THE ELUCIDATION OF THE EQUILIBRIA EXISTING IN THE LATTER

Author: %%ROSS, ARCHIBALD S.%%

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S1	47	E4-E47
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L1 223 S E3,E15-E17

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L3 2168 S E3,E20,E21
L4 1 S L2 AND L3
L5 426 S L3 (L) 1995/RPY
L6 28 S L3 (S) 1995/RPY
L7 12 S L3 AND (BUFFEL? OR GRASS? OR CENCHRUS OR CILIARIS OR PEROXIDA
L8 8 S L6 (S) (AUST J BOT OR PLANT SCI)/RWK
L9 5 S L7 AND L8
L10 6 S L2,L4,L9
L11 3 S L8 NOT L10
L12 9 S L10,L11 AND L1-L11
L13 7 S L12 NOT L1
L14 0 S L3 (S) (DISSERT? OR THESIS)/RWK
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L16 2 L12 NOT L13

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L16 ANSWER 1 OF 2 SCISEARCH COPYRIGHT 2003 THOMSON ISI
AN 95:696190 SCISEARCH
GA The Genuine Article (R) Number: RY206
TI MOLECULAR-CLONING AND CHARACTERIZATION OF ***PEROXIDASES FROM
BUFFEL GRASS (CENCHRUS-CILIARIS L)
AU ROSS A H; MANNERS J M; BIRCH R G (Reprint)
CS UNIV QUEENSLAND, DEPT BOT, BRISBANE, QLD 4072, AUSTRALIA (Reprint); UNIV
QUEENSLAND, DEPT BOT, BRISBANE, QLD 4072, AUSTRALIA; UNIV QUEENSLAND,
COOPERAT RES CTR TROP PLANT PATHOL, BRISBANE, QLD 4072, AUSTRALIA
CYA AUSTRALIA
SO PLANT SCIENCE, (01 SEP 1995) Vol. 110, No. 1, pp. 95-103.
ISSN: 0168-9452.
DT Article; Journal
FS LIFE; AGRI
LA ENGLISH
REC Reference Count: 42
AB **Buffel grass (Cenchrus ciliaris**
L.) peroxidase cDNAs were isolated by hybridisation to an
oligonucleotide from a conserved region of all plant **peroxidases**
and a **peroxidase** cDNA clone from wheat. The 36 clones isolated
were classified into one homogenous and three apparently heterogenous
groups by cross-hybridisation and sequence homologies. Nine cDNAs were
subcloned, partially sequenced and identified as **peroxidase**
homologues by the presence of conserved sequences. Two full-length clones
(PX7 and PX18) were completely sequenced and the deduced protein sequences
revealed between 38% and 77% homology to other plant **peroxidases**
. The mRNAs corresponding to five **peroxidase** cDNAs were analysed
by northern analysis, to test for tissue specific or wound inducible
expression. The **peroxidases** encoded by three clones, including
PX7 and PX18, were expressed preferentially in leaves. The other two
clones showed a marked wound response in leaves. No clone was strongly
expressed in stems. Southern blot analysis indicated that PX18 is coded

for by a single copy gene, whereas PX7 is represented in the **buffel grass** genome by five or six copies. This indicates the complexity of the **buffel grass peroxidase** gene family with respect to identification of **peroxidase** genes implicated in defence or developmental signification.

CC PLANT SCIENCES
 ST Author Keywords: MOLECULAR CLONING; PEROXIDASE GENE FAMILY;
BUFFEL GRASS; CENCHRUS CILIARIS;
 TISSUE SPECIFIC; WOUND INDUCIBLE
 STP KeyWords Plus (R): INDUCED PUTATIVE PEROXIDASE; HIGHLY ANIONIC
PEROXIDASE; TRITICUM-AESTIVUM L; SEQUENCE ALIGNMENT; PHYLOGENETIC
 TREES; CDNA; PLANTS; INDUCTION; WHEAT; GENES
 RF 93-4826 002; PHYLOGENETIC POSITION; 18S RIBOSOMAL-RNA GENE SEQUENCE;
 ANAEROBIC THERMOPHILIC BACTERIA
 93-4847 002; HETEROLOGOUS EXPRESSION; CHROMOSOMAL DNA; GENE ENCODING
 METHYLMALONYL-COENZYME-A MUTASE
 93-0359 001; RUMINAL FERMENTATION; INSULIN ACTION IN TYPE-2
 (NON-INSULIN-DEPENDENT) DIABETES-MELLITUS; BEEF STEERS; DIGESTA KINETICS;
 LACTATING DAIRY-COWS
 93-1177 001; RANDOM AMPLIFIED POLYMORPHIC DNA MARKERS; RFLP-BASED LINKAGE
 MAP; RAPD GENOTYPING COSTS

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
AUSUBEL F M	1990			CURRENT PROTOCOLS MO
BARCELO A R	1989	63	31	PLANT SCI
BATE N J	1994	91	7608	P NATL ACAD SCI USA
BREDA C	1993	12	268	PLANT CELL REP
BUFFARD D	1990	87	8874	P NATL ACAD SCI USA
CAMPA A	1991	2	25	PEROXIDASES CHEM BIO
CAVAYE J	1991			BUFFEL BOOK GUIDE BU
CHIRGIN J M	1979	18	5294	BIOCHEMISTRY-US
DOYLE J J	1990	12	13	FOCUS
FENG D F	1987	25	351	J MOL EVOL
FUJIYAMA K	1988	173	681	EUR J BIOCHEM
GERLACH W L	1979	7	1869	NUCLEIC ACIDS RES
GREPPIN H	1986			MOL PHYSL ASPECTS PL
HALPIN C	1994	6	339	PLANT J
HIGGINS D G	1992	8	189	COMPUT APPL BIOSCI
JOHANSSON A	1992	18	1151	PLANT MOL BIOL
JOSHI C P	1987	15	9627	NUCLEIC ACIDS RES
KAWAOKA A	1994	13	149	PLANT CELL REP
LAGRIMINI L M	1987	84	438	PLANT PHYSIOL
LIPMAN D J	1985	227	1435	SCIENCE
LIU T T Y	1993	102	103	PLANT PHYSIOL
LUTCKE H A	1987	6	43	EMBO J
MINSON D J	1990			FORAGE RUMINANT NUTR
MINSON D J	1980		143	GRAZING ANIMALS
NI W	1994	3	120	TRANSGENIC RES
REBMANN G	1991	16	329	PLANT MOL BIOL
REIMMANN C	1992	100	1611	PLANT PHYSIOL
RITTER D	1993	102	1351	PLANT PHYSIOL
ROBERTS E	1989	217	223	MOL GEN GENET
ROBERTS E	1988	11	15	PLANT MOL BIOL
ROSS A H	1995	43	193	AUST J BOT
ROTHSTEIN S J	1989	6	221	OXFORD SURVEYS PLANT
SAITOU N	1987	4	406	MOL BIOL EVOL
SAMBROOK J	1989			MOL CLONING LABORATO
SANGER F	1977	74	5463	P NATL ACAD SCI USA
SCHWEIZER P	1989	12	643	PLANT MOL BIOL
TERASHIMA N	1993		247	FORAGE CELL WALL STR

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VANHUYSTEE R B	1991 2	155	PEROXIDASES CHEM BIO
VONHEIJNE G	1990 115	195	J MEMBRANE BIOL
WALTER M H	1992		PLANT GENE RES GENES
WELINDER K G	1992 2	388	CURR OPIN STRUCT BIO
WOODS D	1984 6	1	FOCUS

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 AN 95:446305 SCISEARCH
 GA The Genuine Article (R) Number: RE730
 TI EMBRYOGENIC CALLUS PRODUCTION, PLANT-REGENERATION AND TRANSIENT
 GENE-EXPRESSION FOLLOWING PARTICLE BOMBARDMENT IN THE PASTURE
GRASS, CENCHRUS-CILIARIS (GRAMINEAE)
 AU ROSS A H; MANNERS J M; BIRCH R G (Reprint)
 CS UNIV QUEENSLAND, DEPT BOT, ST LUCIA, QLD 4072, AUSTRALIA (Reprint); UNIV
 QUEENSLAND, DEPT BOT, ST LUCIA, QLD 4072, AUSTRALIA; UNIV QUEENSLAND, CRC
 TROP PLANT PATHOL, ST LUCIA, QLD 4072, AUSTRALIA
 CYA AUSTRALIA
 SO AUSTRALIAN JOURNAL OF BOTANY, (1995) Vol. 43, No. 2, pp. 193-199.
 ISSN: 0067-1924.
 DT Article; Journal
 FS AGRI
 LA ENGLISH
 REC Reference Count: 19
 AB Callus initiated from surface sterilised, mature seeds of
buffel grass (Cenchrus ciliaris L.)
 gave rise to an embryogenic form when cultured on Murashige and Skoog's
 nutrient medium supplemented with 3% sucrose, 5% coconut water and 4 mg
 L(-1) 2,4-D. Multiple green shoots regenerated on 20% to 50% of
 embryogenic calli after transfer to hormone-free medium and incubation in
 the light. Variations in cytokinin concentration and light intensity
 during regeneration did not significantly increase the regeneration
 frequency or the number of shoots produced. Regenerated plants developed
 normally when transplanted to soil. A high frequency of transient
 expression of the beta-glucuronidase gene resulted following transfer into
 embryogenic callus by particle bombardment. This is a promising system for
 production of transformed **buffel grass** plants, if the
 frequency of shoot production can be increased.

CC PLANT SCIENCES
 STP KeyWords Plus (R): CULTURED IMMATURE INFLORESCENCES; MICROPROJECTILE
 BOMBARDMENT; TRANSGENIC PLANTS; SOMATIC EMBRYOGENESIS; TISSUE-CULTURE;
 CELLS; TRANSFORMATION
 RF 93-2518 001; TRANSGENIC TOBACCO; TRANSIENT EXPRESSION OF GUS REPORTER
 GENE; PARTICLE BOMBARDMENT; STABLE TRANSFORMATION; PLANT MERISTEMS;
 IMMATURE EMBRYOS
 93-5740 001; SOMATIC EMBRYOGENESIS; ADVENTITIOUS SHOOT FORMATION; ANTER
 CULTURE; INTERSPECIFIC ARACHIS HYBRIDS; FIELD PERFORMANCE; HYPOCOTYL
 PROTOPLASTS

RE

Referenced Author (RAU)	Year VOL PG	Referenced Work (RWP)
	(RPY) (RVL) (RPG)	
AHN B J	1985 25 1107	CROP SCI
AKASHI R	1992 82 213	PLANT SCI
BIRCH R G	1991 18 453	AUST J PLANT PHYSIOL
BOWER R	1992 2 409	PLANT J
CAVAYE J	1991	BUFFEL BOOK GUIDE BU
CHERNEY J H	1991 46 157	ADV AGRON
CHRISTOU P	1991 9 957	BIO-TECHNOL
FRANKS T	1991 18 471	AUST J PLANT PHYSIOL
GORDONKAMM W J	1990 2 603	PLANT CELL
HARTMAN C L	1994 12 919	BIO-TECHNOL
KACKAR A	1991 29 62	INDIAN J EXP BIOL
KLEIN T M	1988 6 559	BIOTECHNOLOGY

LAST D I	1991	81	581	THEOR APPL GENET
MURASHIGE T	1962	15	473	PHYSL PLANTARUM
OZIASAKINS P	1988	73	565	PHYSIOL PLANTARUM
SANKHLA A	1989	58	872	CURR SCI INDIA
VASIL V	1991	9	743	BIOTECHNOLOGY
WANG Z Y	1992	10	691	BIO-TECHNOL
ZHONG H	1993	13	1	PLANT CELL REP

=> d all tot 113

L13 ANSWER 1 OF 7 SCISEARCH COPYRIGHT 2003 THOMSON ISI
 AN 2002:801193 SCISEARCH
 GA The Genuine Article (R) Number: 595GM
 TI Optimizing embryogenic callus production and plant regeneration from
 'Tifton 9' bahiagrass seed explants for genetic manipulation
 AU Grando M. F; Franklin C I; Shatters R G (Reprint)
 CS Univ Florida, Dept Agron, POB 110300, Gainesville, FL 32611 USA (Reprint);
 Univ Florida, Dept Agron, Gainesville, FL 32611 USA; ARS, USDA, USHRL, Ft
 Pierce, FL 34945 USA; Savannah State Univ, Dept Biol, Savannah, GA 31404
 USA
 CYA USA
 SO PLANT CELL TISSUE AND ORGAN CULTURE, (DEC 2002) Vol. 71, No. 3, pp.
 213-222.
 Publisher: KLUWER ACADEMIC PUBL, VAN GODEWIJCKSTRAAT 30, 3311 GZ
 DORDRECHT, NETHERLANDS.
 ISSN: 0167-6857.
 DT Article; Journal
 LA English
 REC Reference Count: 47
 AB Bahiagrass (*Paspalum notatum* Flugge) is a warm season forage
 grass widely cultivated in southeastern U.S. and South America.
 The cultivar Tifton 9 has several desirable characteristics such as high
 forage yield, more vigor at the seedling stage, etc.; but its forage
 quality is very low. As an initial step for future genetic manipulations
 to improve its forage characteristics, we have optimized in vitro culture
 conditions for plant regeneration. In this report, we describe an
 efficient method for embryogenic callus induction and plant regeneration
 from bahiagrass (cv. Tifton 9) seed explants, which are readily available
 and easy to manipulate, compared to other explant sources reported in the
 literature.
 Murashige and Skoog (MS) medium containing 30 μ M dicamba and 5 μ M
 6-benzyladenine (BA) was optimal for callus induction and growth. Out of
 9734 seeds cultured, 65.7% germinated and 21.4% produced embryogenic
 callus on this medium. Shoot formation was best when embryogenic calluses
 induced in this medium were transferred to MS medium supplemented with 5
 μ M BA and 1 μ M gibberellic acid with 1640 plantlets formed per gram
 fresh weight of callus tissue. When transferred to hormone-free SH medium,
 shoot systems produced well-developed root systems. The resulting
 plantlets grew normally produced viable seeds when transferred to soil in
 the greenhouse. Histochemical staining for GUS activity arising from
 transient expression of the introduced uidA (beta-glucuronidase) gene
 indicated that bahiagrass embryogenic callus produced by this method is
 suitable for gene transfer via biolistic bombardment; and it can serve as
 a good target tissue for future genetic manipulations to improve the
 forage quality of bahiagrass (cv. Tifton 9).
 CC BIOTECHNOLOGY & APPLIED MICROBIOLOGY; PLANT SCIENCES
 ST Author Keywords: forage grass; monocot; *Paspalum notatum* Flugge;
 somatic embryos; tissue culture
 STP KeyWords Plus (R): TRANSGENIC SUGARCANE PLANTS; AGROSTIS-PALUSTRIS Huds;
 POA-PRATENSIS L; SOMATIC EMBRYOGENESIS; MICROPROJECTILE BOMBARDMENT;
 KENTUCKY BLUEGRASS; PASPALUM-NOTATUM; TISSUE-CULTURE; 2,4-
 DICHLOROPHENOXYACETIC ACID; PARTICLE BOMBARDMENT

RE

Referenced Author (RAU)	Year (R PY)	VOL (R VL)	PG (R PG)	Referenced Work (RWK)
AKASHI R	1993	90	73	PLANT SCI
AKASHI R	1992	82	219	PLANT SCI
BERLYN G P	1976		30	BOT MICROTECHNIQUE C
BHASKARAN S	1989	64	217	ANN BOT-LONDON
BHASKARAN S	1990	30	1328	CROP SCI
BOVO O A	1986	124	481	J PLANT PHYSIOL
BOVO O A	1989	65	217	PLANT SCI
BOWER R	1992	2	409	PLANT J
BURTON G W	1989	29	1326	CROP SCI
CARDONA C A	1997	37	1297	CROP SCI
CHEN Z H	1995	14	354	PLANT CELL REP <--
CHO M J	1999	148	9	PLANT SCI
CHRISTENSEN A H	1996	5	213	TRANSGENIC RES
CHRISTENSEN A H	1992	18	675	PLANT MOL BIOL
FRANKLIN C I	1990	9	443	PLANT CELL REP
FRANKLIN C I	1991	24	199	PLANT CELL TISS ORG
GALLOMEAGHER M	1996	36	1367	CROP SCI
GAMBORG O L	1968	50	151	EXP CELL RES
GENDY C	1996	15	900	PLANT CELL REP
GENOVESI D	1992	18	189	IN VITRO CELL DEV
GRIFFIN J D	1995	14	721	PLANT CELL REP <--
JEFFERSON R A	1987	5	387	PLANT MOL BIOL REP
MAROUSKY F J	1990	20	125	PLANT CELL TISS ORG
MURASHIGE T	1962	15	473	PHYSIOL PLANTARUM
OZIASAKINS P	1988	73	565	PHYSIOL PLANTARUM
RITALA A	1995	85	81	EUPHYTICA <--
ROSS A H	1995	43	193	AUST J BOT <--
SANKHLA A	1989	58	872	CURR SCI
SCHENK R U	1972	50	199	CAN J BOT
SHATTERS R G	1994	34	1378	CROP SCI
SIVAMANI E	1996	15	322	PLANT CELL REP
SOMERS D A	1992	10	1589	BIO-TECHNOL
VANDERVALK P	1995	40	101	PLANT CELL TISS ORG <--
VANDERVALK P	1989	7	644	PLANT CELL REP
VARSHNEY A	1998	40	137	BIOL PLANTARUM
VASIL I K	1988	6	397	BIOTECHNOLOGY
VASIL V	1981	68	864	AM J BOT
VASIL V	1992	10	667	BIO-TECHNOL
VITANOVA Z	1995	14	437	PLANT CELL REP <--
WAN Y C	1994	104	37	PLANT PHYSIOL
WAN Y	1995	196	7	PLANTA <--
WANG D	1982	25	147	PLANT SCI LETT
WEIGEL R C	1985	5	151	PLANT CELL TISS ORG
WERNICKE W	1986	131	131	PROTOPLASMA
ZHONG H	1993	13	1	PLANT CELL REP
ZHONG H	1991	10	453	PLANT CELL REP
ZHONG H	1992	187	483	PLANTA

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GA The Genuine Article (R) Number: 499AX

TI Forage and turf **grass** biotechnology

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CS Samuel Roberts Noble Fdn Inc, Forage Biotechnol Grp, Ardmore, OK 73401 USA
(Reprint)

CYA USA

SO CRITICAL REVIEWS IN PLANT SCIENCES, (OCT 2001) Vol. 20, No. 6, pp.
573-619.

Publisher: CRC PRESS LLC, 2000 CORPORATE BLVD NW, JOURNALS CUSTOMER

SERVICE, BOCA RATON, FL 33431 USA.
ISSN: 0735-2689.

DT General Review; Journal

LA English

REC Reference Count: 404

AB Forage and turf **grasses** are the backbone of sustainable agriculture and contribute extensively to the world economy. They play a major role in providing high quality and economical meat, milk, and fiber products and are important in soil conservation, environmental protection, and outdoor recreation. Conventional breeding contributed substantially to the genetic improvement of forage and turf **grasses** in the last century. The relatively new developments in genetic manipulation of these species open up opportunities for incorporating cellular and molecular techniques into **grass** improvement programs. For some commonly used forage and turf species, significant advances have been achieved in the following areas: (1) establishment of a tissue culture basis for the efficient regeneration of fertile and genetically stable plants, (2) generation of transgenic plants by biolistic transformation and direct gene transfer to protoplasts, (3) recovery of intergeneric somatic **grass** plants by protoplast fusion, (4) development of molecular markers for marker assisted selection, and (5) sequencing of expressed sequenced tags and the development of DNA array technologies for gene discovery. Although difficulties still exist in genetic manipulation of these recalcitrant monocot species, impressive progress has been made toward the generation of value-added novel **grass** germplasm incorporating traits such as improved forage quality. The joint efforts of molecular biologists and plant breeders make the available biotechnological methods a useful tool for accelerating forage and turf **grass** improvement.

CC PLANT SCIENCES.

ST Author Keywords: forage **grasses**; turf **grasses**; tissue culture; plant regeneration; genetic transformation; transgenic plants; somatic hybrids; molecular markers

STP KeyWords Plus (R): FESTUCA-ARUNDINACEA SCHREB; LOLIUM-PERENNE L; CELL-SUSPENSION-CULTURES; DIRECT GENE-TRANSFER; AGROSTIS-PALUSTRIS Huds; PANICUM-MAXIMUM JACQ; POA-PRATENSIS L; PENNISETUM-PURPUREUM SCHUM; KENTUCKY BLUEGRASS CULTIVARS; ASYMMETRIC SOMATIC HYBRIDIZATION

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
ABDULLAH A A	1994	112	342	PLANT BREEDING
AHLOOWALIA B S	1983	23	1141	CROP SCI
AHLOOWALIA B S	1975	15	449	CROP SCI
AHN B J	1985	25	1107	CROP SCI
AHN S	1993	241	483	MOL GEN GENET
AHN B J	1987	27	594	CROP SCI
AKASHI R	1992	82	219	PLANT SCI
AKASHI R	1993	90	73	PLANT SCI
AKASHI R	1992	82	213	PLANT SCI
AKASHI R	1991	41	85	JPN J BREED
AKKAYA M S	1992	132	1131	GENETICS
ALDERSON J	1995			GRASS VARIETIES US <--
ALM V	2000		64	MOL BREEDING FORAGE
ALTPETER F	1994	113	327	PLANT BREEDING
ARCIONI S	1983	32	33	EUPHYTICA
ARTUNDUAGA I R	1988	12	13	PLANT CELL TISSUE OR
ARTUNDUAGA I R	1989	25	753	IN VITRO CELL DEV B
ASANO Y	1991	79	247	PLANT SCI
ASANO Y	1990	72	267	PLANT SCI
ASANO Y	1989	8	141	PLANT CELL REP
ASANO Y	1994	13	243	PLANT CELL REP
ASAY K H	1986	39	261	J RANGE MANAGE

ASAY K H	1985 25	575	CROP SCI
ASAY K H	1989 15	1	CSSA SPEC PUBL
BALFOURIER F	1994 73	386	HEREDITY
BALFOURIER F	1994 72	55	HEREDITY
BAN Y	1971 21	77	B FAC AGR KAGASHIMA
BANTE I	1990	105	IMPACT BIOTECHNOLOGY
BARNES R F	1995 1	3	INTRO GRASSLAND AGR
BEEVER D E	1993	158	GRASSLAND OUR WORLD
BENNETZEN J L	1993 9	259	TRENDS GENET
BERGELSON J	1999	325	APPL PLANT BIOTECHNO
BERNARDVAILHE M A	1996 44	1164	J AGR FOOD CHEM
BERNARDVAILHE M A	1996 72	385	J SCI FOOD AGR
BERT P F	1999 99	445	THEOR APPL GENET
BHALLA P L	1999 96	11676	P NATL ACAD SCI USA
BINGHAM T B	1995 2	21	FORAGES
BLANCHE F C	1986 26	1245	CROP SCI
BLENDA A V	2001 9	194	PLANT ANIMAL GENOME
BOPPENMEIER J	1989 103	216	PLANT BREEDING
BOUDET A M	1996 2	25	MOL BREEDING
BOVO O A	1986 124	481	J PLANT PHYSIOL
BOYD L A	1986 97	246	PLANT BREEDING
BRUMMER E C	1993 86	329	THEOR APPL GENET
BUCKNER R C	1977 17	672	CROP SCI
BUCKNER R C	1983 23	399	CROP SCI
BUXTON D R	1988 28	553	CROP SCI
CAETANOANOLLES G	1991 9	553	BIO-TECHNOL
CAETANOANOLLES G	1991 9	294	PL MOL BIOL REP
CALLAHAN L M	1993 7	761	INT TURFGRASS SOC RE
CASLER M D	2000 40	13	CROP SCI
CASLER M D	2000 40	1019	CROP SCI
CHAI B L	1998 38	1320	CROP SCI
CHANDLER S F	1984 117	147	J PLANT PHYSIOL
CHAPMAN H D	1972 34	373	J ANIM SCI
CHARMET G	1997 94	1038	THEOR APPL GENET
CHARMET G	2000	50	MOL BREED FOR CROPS
CHARMET G	1993 40	77	GENET RES CROP EVOL
CHARMET G	1994 87	641	THEOR APPL GENET
CHARMET G	1994 41	175	GENET RESOUR CROP EV
CHATERTON N J	1991 29	367	PLANT PHYSIOL BIOCH
CHEN C H	1977 17	847	CROP SCI
CHEN C H	1979 19	117	CROP SCI
CHEN C	1999 39	1676	CROP SCI
CHEN C	1997 37	76	CROP SCI
CHEN C	1998 97	255	THEOR APPL GENET
CHERNY J H	1991 46	157	ADV AGRON
CHO M J	2000 19	1084	PLANT CELL REP
CHRISTOU P	1992 2	275	PLANT J
COBB B G	1985 40	121	PLANT SCI
COLLINS F S	1998 8	1229	GENOME RES
CONGER B V	1978 18	157	CROP SCI
CONGER B V	1983 221	850	SCIENCE
CREEMERSMOLENAAR J	1989 63	167	PLANT SCI
CREEMERSMOLENAAR J	1988 57	165	PLANT SCI
CROUGHAN S S	1994 34	542	CROP SCI
DAHLEEN L S	1990 79	39	THEOR APPL GENET
DALE P J	1980 100	73	Z PFLANZENPHYSIOL
DALE P J	1981 1	47	PLANT CELL TISSUE OR
DALTON S J	1988 132	170	J PLANT PHYSL
DALTON S J	1999 18	721	PLANT CELL REP
DALTON S J	1995 108	63	PLANT SCI
DALTON S J	1988 12	137	PLANT CELL TISSUE OR
DALTON S J	1998 312	31	PLANT SCI
DELOZIER V	1999 19	145	AGRONOMIE

DENCHEV P D	1997	16	813	PLANT CELL REP
DENCHEV P D	1995	40	43	PLANT CELL TISS ORG <--
DENCHEV P D	1994	34	1623	CROP SCI
DUNCAN R R	1996	58	201	ADV AGRON
DUSSLE C M	2001	9		PLANT ANIMAL GENOME
DUVICK D N	1984		15	GENETIC CONTRIBUTION
EAPEN S	1989	61	27	PLANT SCI
EBSKAMP M J M	1994	12	272	BIOTECHNOLOGY
ECHENIQUE V	1996	46	123	PLANT CELL TISS ORG
EHLKE N J	1986	26	1123	CROP SCI
EICHHORN M M	1986	26	835	CROP SCI
EIZENGA G C	1990	22	7	PLANT CELL TISS ORG
EIZENGA G C	1991	51	249	EUPHYTICA
EIZENGA G C	1989	32	373	GENOME
EUJAYL I	2001			IN PRESS THEOR APPL
EVANS D A	1989	5	46	TRENDS GENET
FLADUNG M	1986	3	169	PLANT CELL REP
FOURNIER D	1996	46	165	PLANT CELL TISS ORG
FRAME B R	1994	6	941	PLANT J
FRANKLIN C I	1990	9	443	PLANT CELL REP
FROMM M E	1986	319	791	NATURE
FUJIMORI M	2000		52	MOL BREED FOR CROPS
GABRIELSEN B C	1990	30	1313	CROP SCI
GALE M D	1998	95	1971	P NATL ACAD SCI USA
GALLINET W C	1977		1	CORN CORN IMPROVEMEN
GAMBORG O L	1976	12	473	IN VITRO-J TISSUE CU
GARCIA A	1994	73	355	HEREDITY
GAVIN A L	1989	103	251	PLANT BREEDING
GILLILAND T J	1982	10	415	SEED SCI TECHNOL
GLEWEN K L	1984	24	137	CROP SCI
GONZALES R A	1987	23	581	IN VITRO CELL DEV
GRATTAPAGLIA D	1994	137	1121	GENETICS
GRAY D J	1984	122	196	PROTOPLASMA
GUO D J	2001	13	73	PLANT CELL
GUPTA P K	1996	70	45	CURR SCI INDIA
GUTHRIDGE K M	2001	9	141	PLANT ANIMAL GENOME
GYULAI G	1992	11	266	PLANT CELL REP
HA D B D	1982	108	317	Z PFLANZENPHYSIOL
HA S B	1992	11	601	PLANT CELL REP
HALBERG N	1990	105	89	PLANT BREEDING
HALPIN C	1994	6	339	PLANT J
HANNA W W	1984	67	155	THEOR APPL GENET
HANNING G E	1986	123	23	J PLANT PHYSIOL
HARTMAN C L	1994	12	919	BIO-TECHNOL
HAUPTMANN R M	1987	6	265	PLANT CELL REP
HAUPTMANN R M	1988	86	602	PLANT PHYSIOL
HAYDU Z	1981	59	269	THEOR APPL GENET
HAYWARD M D	1988	101	24	PLANT BREEDING
HAYWARD M D	1998	117	451	PLANT BREEDING
HAYWARD M D	1977	79	59	Z PFLANZENZUCHT
HAYWARD M D	1990	104	68	PLANT BREEDING
HEATH R	1998	153	649	J PLANT PHYSIOL
HELENTJARIS T G	1992		357	PLANT BREEDING 1990S
HENSGENS L A M	1993	22	1101	PLANT MOL BIOL
HESZKY L E	1989	8	174	PLANT CELL REP
HEYSER J W	1982	22	1070	CROP SCI
HIEI Y	1994	6	271	PLANT J
HIGGINS T J	1989		441	BIOL WOOL HAIR
HIRATA M	2000		51	MOL BREE FOR CROPS 2
HOPKINS A A	1993	33	253	CROP SCI
HORN M E	1988	7	371	PLANT CELL REP
HORN M E	1988	7	469	PLANT CELL REP
HOUSLEY T L	1993		191	SCI TECHNOLOGY FRUCT

HU W J	1999	17	808	NAT BIOTECHNOL
HUFF D R	1993	86	927	THEOR APPL GENET
HULBERT S H	1990	87	4251	P NATL ACAD SCI USA
HUMPHREYS M O	1992	59	141	EUPHYTICA
HUMPHREYS M O	1997	3	71	P 18 INT GRASSL C WI
HUMPHREYS M W	1991	34	59	GENOME
INOKUMA C	1996	15	737	PLANT CELL REP
ISHIDA Y	1996	14	745	NAT BIOTECHNOL
JACKSON J A	1986	1	85	PLANT TISSUE ITS AGR
JACKSON J A	1988	132	351	J PLANT PHYSIOL
JACKSON J A	1989	8	161	PLANT CELL REP
JAGLOOTTOSEN K R	1998	280	104	SCIENCE
JAUHAR P P	1993	18	1	MONOGRAPHS THEORETIC
JONES E L	1991	30	163	IRISH J AGR RES
JONES E S	2000	1	48	MOL BREED FOR CROPS
JUNG H G	1986	62	1703	J ANIM SCI
KAEPPLER H F	1992	84	560	THEOR APPL GENET
KAO K N	1973	212	207	C INT CNRS
KASPERBAUER M J	1985	25	1091	CROP SCI
KASPERBAUER M J	1979	19	457	CROP SCI
KASPERBAUER M J	1980	20	103	CROP SCI
KASUGA M	1999	17	287	NAT BIOTECHNOL
KAUL K	1990	1	13	BIOTECHNOLOGY TALL F
KLEIN T M	1993	4	583	CURR OPIN BIOTECH
KORTT A A	1991	195	329	EUR J BIOCHEM
KRANS J V	1982	22	1193	CROP SCI
KUAI B	1996	15	804	PLANT CELL REP
KUBIK C	1999	39	1136	CROP SCI
KUO Y J	1993	33	1394	CROP SCI
KWOK P Y	1996	31	123	GENOMICS
LALLEMAND J	1991	4	11	PLANT VAR SEEDS
LARKIN P J	1981	60	197	THEOR APPL GENET
LEACH C R	1987	58	303	HEREDITY
LEE L	1996	36	401	CROP SCI
LEE L	1996	115	1	PLANT SCI
LEMIEUX B	1998	4	277	MOL BREEDING
LINSMAIER E M	1965	18	100	PHYSIOL PLANTARUM
LIVESEY V	1991	55	73	EUPHYTICA
LO P F	1980	20	363	CROP SCI
LOCKHART D J	2000	405	827	NATURE
LOWE K W	1979	19	397	CROP SCI
LU C	1982	69	77	J AM J BOT
LU C	1981	59	275	THEOR APPL GENET
LU C Y	1981	104	311	Z PFLANZENPHYSIOL
MADSEN S	1995	114	165	PLANT BREEDING
MARKERT C L	1959	45	753	P NATL ACAD SCI USA
MAROUSKY F J	1990	20	125	PLANT CELL TISS ORG
MARSHALL E	1999	284	406	SCIENCE
MCALISTER F M	1998	25	225	AUST J PLANT PHYSIOL
MCBRIDE K E	1995	13	362	BIO-TECHNOL
MCCLENDON M T	2001	9	183	PLANT ANIMAL GENOME
MCDONNELL R E	1984	24	573	CROP SCI
MCFARLANE N	2000	1	83	MOL BREEDING FORAGE
MCMILLIN D E	1983	1	3	ISOZYMES PLANT GEN A
MCNABB W C	1994	64	53	J SCI FOOD AGR
METZINGER B D	1987	10	31	PLANT CELL TISS ORGA
MIAN M A R	2001	9	73	PLANT ANIMAL GENOME
MIAN M A R	2000	1	146	MOL BREED FOR CROPS
MICHELMORE R W	1991	88	9828	P NATL ACAD SCI USA
MIKKELSEN T R	1996	380	31	NATURE
MILLER D A	1995	1	117	FORAGES
MOHANTY B D	1985	5	147	PLANT CELL TISS ORG
MORRISH F M	1990	80	409	THEOR APPL GENET

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MORRISON R A	1988	6	684	BIO-TECHNOL
MOSER L E	1996	1	1	COOL SEASON FORAGE G
MUCCIARELLI M	1993	35	267	PLANT CELL TISS ORG
MUELLER U G	1999	14	389	TRENDS ECOL EVOL
MURASHIGE T	1962	15	473	PHYSIOL PLANTARUM
MURRAY F R	1992	233	1	MOL GEN GENET
NAGARATHNA K C	1993	90	53	PLANT SCI
NAYAK P	1989	8	296	PLANT CELL REP
NELSON C J	1995	1	15	FORAGES
NI W T	1994	3	120	TRANSGENIC RES
NIELSEN K A	1993	12	537	PLANT CELL REP
NIELSEN G	1980	92	49	HEREDITAS
NIELSEN K A	1993	141	589	J PLANT PHYSIOL
NIIZEKI M	1977	58	343	J FACUL AGR HOKKAIDO
NITZSCHE W	1970	57	199	NATURWISSENSCHAFTEN
NITZSCHE W	1977		46	HAPLOIDS PLANT BREED
OHMURA T	1993	7	754	INT TURF SOC RES J
OLESEN A	1995	86	199	EUPHYTICA
OLESEN A	1988	101	60	PLANT BREEDING
OLSON M	1989	245	1434	SCIENCE
OPSAHLFERSTAD H G	1994	13	594	PLANT CELL REP
OPSAHLFERSTAD H G	1994	89	133	THEOR APPL GENET
ORSKOV E R	1990		161	RUMEN ECOSYSTEM
ORTIZ J P A	1997	95	850	THEOR APPL GENET
OSUNAAVILA P	1995	40	33	PLANT CELL TISS ORG
PARAN I	1993	85	985	THEOR APPL GENET
PARK C H	1990	104	184	PLANT BREEDING
PARK C H	1989	8	289	PLANT CELL REP
PARK C H	1989	102	208	PLANT BREEDING
PASAKINSKIENE I	2000	100	384	THEOR APPL GENET
PASZKOWSKI J	1984	3	2717	EMBO J
PATERSON A H	1995	269	1714	SCIENCE
PENMETSA R V	1994	100	171	PLANT SCI
PEREZ M	1990	265	16210	J BIOL CHEM
PEREZVICENTE R	1993	142	610	J PLANT PHYSIOL
PEREZ T	1998	7	1347	MOL ECOL
PILONSMITS E A H	1995	107	125	PLANT PHYSIOL
PIUS J	1993	32	91	PLANT CELL TISS ORG
POLOK K	1998		157	BREEDING MULTIFUNCTI
POTRYKUS I	1995		55	GENE TRANSFER PLANTS
POTRYKUS I	1990	8	535	BIO-TECHNOL
POTRYKUS I	1986	118	549	METHOD ENZYMOL
POTRYKUS I	1985	199	183	MOL GEN GENET
RADOJEVIC I	1994	45	901	AUST J AGR RES
RAJASEKARAN K	1986	73	4	THEOR APPL GENET
RAJOELINA S R	1990	104	265	PLANT BREEDING
RANGAN T S	1974	72	456	Z PFLANZENPHYSIOL
RANGAN T S	1976	78	208	Z PFLANZENPHYSIOL
RANGAN T S	1983	109	49	Z PFLANZENPHYSIOL
RASHID H	1996	15	727	PLANT CELL REP
REED J N	1985	25	277	ENVIRON EXP BOT
REIS P J	1979		223	PHYSL ENV LIMITATION
RICHARDS H A	2001	20	48	PLANT CELL REP
ROGERS G E	1990	8	6	TRENDS BIOTECHNOL
ROLDANRUIZ I	2000	6	125	MOL BREEDING
ROSE J B	1987	60	191	ANN BOT-LONDON
ROSS A H	1995	43	193	AUST J BOT
ROYLANCE J T	1994	34	1369	CROP SCI
RUIZ I R	1997		231	ADV BIOMETRICAL GENE
RYDER M L	1968		359	WOOL GROWTH
SAITO K	1973	21	1	B FAC AGR HIROSAKI U
SAMANTARAY S	1995	40	37	PLANT CELL TISS ORG
SAMANTARAY S	1997	47	119	PLANT CELL TISSUE OR

SANFORD J C	1988 6	299	TRENDS BIOTECHNOL
SANGWAN R S	1975 75	256	Z PFLANZENPHYSIOL
SANKHLA A	1992 11	368	PLANT CELL REP
SAUL M W	1990 11	176	DEV GENET
SCHENA M	1998 16	301	TRENDS BIOTECHNOL
SCHENA M	1995 270	467	SCIENCE
SEAL A G	1983 50	225	HEREDITY
SEWALT V J H	1997 45	1977	J AGR FOOD CHEM
SEWALT V J H	1997 115	41	PLANT PHYSIOL
SHATTERS R G	1994 34	1378	CROP SCI
SHENOY V B	1992 83	947	THEOR APPL GENET
SIDOLI A	1993 268	21819	J BIOL CHEM
SINGH M B	1991 88	1384	P NATL ACAD SCI USA
SIVADAS P	1990 9	93	PLANT CELL REP
SKENE K G M	1983 90	130	Z PFLANZENZUCHT
SLEPER D A	1985 3	313	PLANT BREEDING REV
SONGSTAD D D	1986 26	827	CROP SCI
SOUTHERN E M	1975 98	503	J MOL BIOL
SPANGENBERG G	1994 97	83	PLANT SCI
SPANGENBERG G	1995 108	209	PLANT SCI
SPANGENBERG G	1994 88	509	THEOR APPL GENET
SPANGENBERG G	1995 85	235	EUPHYTICA
SPANGENBERG G	1995 145	693	J PLANT PHYSIOL
SPANGENBERG G	2000 46	172	BIOTECHNOLOGY AGR FO
SPANGENBERG G	1995 34	183	BIOTECHNOL AGRIC FOR
SPANGENBERG G	1998 18		MONOGRAPHS THEORETIC
SPANGENBERG G	2001	1	MOL BREEDING FORAGE
SPANGENBERG G	1998 4	162	CELL BIOL LAB HDB
SPANGENBERG G	1995	293	GENE TRANSFER PLANTS
SPRENGER N	1995 92	11652	P NATL ACAD SCI USA
STADELmann F J	1998 117	37	PLANT BREEDING
STADELmann F J	1999 39	375	CROP SCI
STADELmann F J	1998 96	634	THEOR APPL GENET
STAMMERS M	1995 74	19	HEREDITY
STANIS V A	1984 275	249	DOKL AKAD NAUK
STEBBINS G L	1971		CHROMOSOME EVOLUTION
STEWART C N	2000 29	832	BIOTECHNIQUES
STONE B A	1994 37	349	NEW ZEAL J AGR RES
SUN G L	1999 42	420	GENOME
SUN G L	1997 40	806	GENOME
SUN G L	1998 96	676	THEOR APPL GENET
SVAB Z	1993 90	913	P NATL ACAD SCI USA
SVITASHEV S	1998 41	120	GENOME
SWEDLUND B	1985 69	575	THEOR APPL GENET
SWEENEY P M	1997 32	1212	HORTSCIENCE
TAKAMIZO T	1990 72	125	PLANT SCI
TAKAMIZO T	1994 28	200	JARQ
TAKAHASHI A	1984 36	161	PLANT SCI LETT
TAKAMIZO T	1991 231	1	MOL GEN GENET
TALWAR M	1989 64	195	ANN BOT-LONDON
TANKSLEY S D	1989 7	257	BIO-TECHNOL
TAYLOR M G	1991 10	120	PLANT CELL REP
TERAKAWA T	1992 11	457	PLANT CELL REP
TERRELL E E	1966 32	138	BOT REV
TINGAY S	1997 11	1369	PLANT J
TOLLENAAAR M	1999 39	1597	CROP SCI
TORELLO W A	1984 24	1037	CROP SCI
TORELLO W A	1984 19	56	HORTSCIENCE
TORELLO W A	1985 20	938	HORTSCIENCE
TYAGI A K	1985 4	115	PLANT CELL REP
USECHE F	2001 9	144	PLANT ANIMAL GENOME
VALLES M P	1993 12	101	PLANT CELL REP
VANARK H F	1991 27	275	PLANT CELL TISS ORG

VANDERMAAS H M	1994 24	401	PLANT MOL BIOL
VANDERMEER I M	1994 6	561	PLANT CELL
VANDERVALK P	1989 7	644	PLANT CELL REP
VANDERVALK P	1995 40	101	PLANT CELL TISS ORG <--
VANDEYNZE A E	1995 249	349	MOL GEN GENET <--
VASIL V	1982 143	454	BOT GAZ
VASIL V	1980 56	97	THEOR APPL GENET
VASIL I K	1988 6	397	BIOTECHNOLOGY
VASIL V	1983 111	233	Z PFLANZENPHYSIOL
VASIL I K	1987 128	193	J PLANT PHYSIOL
VASIL I K	1995	5	CURRENT ISSUES PLANT <--
VASIL V	1988 7	499	PLANT CELL REP
VASIL V	1981 68	864	AM J BOT
VASIL I K	1999	9	PLANT BIOTECHNOLOGY
VILLAMIL C B	1982 22	786	CROP SCI
VOGEL K P	1991 31	1388	CROP SCI
VOGEL K P	2001 20	15	CRIT REV PLANT SCI
VOGEL K P	1981 21	35	CROP SCI
VOS P	1995 23	4407	NUCLEIC ACIDS RES <--
WAN C H	1996 148	718	J PLANT PHYSIOL
WANG Z Y	2001 9	25	PLANT ANIMAL GENOME
WANG L	1996 15	865	PLANT CELL REP
WANG Z Y	1992 10	691	BIO-TECHNOL
WANG Z Y	1995	295	GENE TRANSFER PLANTS <--
WANG D	1982 25	147	PLANT SCI LETT
WANG D Y	1984 3	88	PLANT CELL REP
WANG G L	1994 136	1421	GENETICS
WANG Z Y	1994 103	93	PLANT SCI
WANG G R	1997 151	83	J PLANT PHYSIOL
WANG Z Y	1993 94	179	PLANT SCI
WANG Z Y	1993 12	95	PLANT CELL REP
WANG W	2000 20	219	SPECTROSC SPECT ANAL
WANG Z Y	2001		IN PRESS PLANT CELL
WANG Z Y	1995	81	CURRENT ISSUES PLANT <--
WARNKE S E	1998 38	817	CROP SCI
WARNKE S E	2001 9	26	PLANT ANIMAL GENOME
WARNKE S E	1997 37	203	CROP SCI
WATSON L	1992		GRASS GENERA WORLD
WEEDEN N F	1985 65	985	CAN J PLANT SCI
WEHNER D J	1976 16	475	CROP SCI
WENZEL G	1984 1	311	CELL CULTURE SOMATIC
WENZEL G	1995	127	CURRENT ISSUES PLANT <--
WU L	1986 51	125	CYTOLOGIA
WU L	1994 119	126	J AM SOC HORTIC SCI
WU L	1978 65	268	AM J BOT
WU L	1984 24	763	CROP SCI
WU X L	1997 1	35	P 18 INT GRASSL C WI
XIAO L	1997 16	874	PLANT CELL REP
XU M	2001 9	142	PLANT ANIMAL GENOME
XU W W	1991 34	686	GENOME
XU W W	1995 91	947	THEOR APPL GENET <--
XU W W	1992 32	1366	CROP SCI
XU W W	1994 88	685	THEOR APPL GENET
XU W W	1994 34	246	CROP SCI
YANESHITA M	1993 87	129	THEOR APPL GENET
YANESHITA M	1993 7	786	INT TURFT SOC RES J
YE X	1997 16	379	PLANT CELL REP
YE X D	2001 20	205	PLANT CELL REP
YU T T	2000 133	229	HEREDITAS
ZAGHMOUT O M F	1988 23	615	HORTSCIENCE
ZAGHMOUT O M F	1989 29	815	CROP SCI
ZAGHMOUT O M F	1992 11	142	PLANT CELL REP
ZAGHMOUT O M	1990 26	419	IN VITRO CELL DEV B

ZHANG L H	1999	98	895	THEOR APPL GENET
ZHONG H	1993	13	1	PLANT CELL REP
ZHONG H	1991	10	453	PLANT CELL REP
ZHU Y	2001	9	145	PLANT ANIMAL GENOME

L13 ANSWER 3 OF 7 SCISEARCH COPYRIGHT 2003 THOMSON ISI
 AN 2001:830013 SCISEARCH
 GA The Genuine Article (R) Number: 482AE
 TI The investigation of optimal bombardment parameters for transient and stable transgene expression in sorghum
 AU Able J A; Rathus C; Godwin I D (Reprint)
 CS Univ Queensland, Sch Land & Food Sci, Brisbane, Qld 4072, Australia (Reprint)
 CYA Australia
 SO IN VITRO CELLULAR & DEVELOPMENTAL BIOLOGY-PLANT, (MAY-JUN 2001) Vol. 37, No. 3, pp. 341-348.
 Publisher: C A B I PUBLISHING, C/O PUBLISHING DIVISION, WALLINGFORD OX10 8DE, OXON, ENGLAND.
 ISSN: 1054-5476.
 DT Article; Journal
 LA English
 REC Reference Count: 45
 AB This report outlines the development of optimized particle inflow gun (PIG) parameters for producing transgenic sorghum (*Sorghum bicolor* (L.) Moench). Both transient and stable expression were examined when determining these parameters. The uidA reporter gene (GUS) encoding beta-glucuronidase was used in transient experiments and the green fluorescent protein (GFP) used to monitor stable expression. Initially, optimization was conducted using leaf segments, as the generation of sorghum callus in sufficiently large quantities is time-consuming. Following leaf optimization, experiments were conducted using callus, identifying a high similarity between the two tissue types ($r^2 = 0.83$). High levels of GUS expression were observed in both leaf and callus material when most distant from the DNA expulsion point, and using a pressure greater than 1800 kPa. A higher level of expression was also observed when the aperture of the helium inlet valve was constricted. Using the optimized conditions (pressure of 2200 kPa, distance to target tissue of 15 cm from the expulsion point, and the aperture of the helium inlet valve at one full turn), three promoters (Ubiquitin, Actin1 and CaMV 35S) were evaluated over a 72-h period using GUS as the reporter gene. A significantly higher number of GUS foci were counted with the Ubiquitin construct over this period, compared to the Actin1 and CaMV 35S constructs. Stable callus sectors (on 2 mg l(-1) bialaphos) with GFP expression were visualized for as long as 6 wk post-bombardment. Using this optimized protocol, several plants were regenerated after having been bombarded with the pAHC20 construct (containing the bar gene), with molecular evidence confirming integration.
 CC PLANT SCIENCES; CELL BIOLOGY; DEVELOPMENTAL BIOLOGY
 ST Author Keywords: transformation; GUS; green fluorescent protein; particle inflow gun (PIG)
 STP KeyWords Plus (R): GREEN FLUORESCENT PROTEIN; PARTICLE INFLOW GUN; MICROPARTICLE BOMBARDMENT; UBIQUITIN PROMOTER; GENE-EXPRESSION; PLANT-TISSUES; TRANSFORMATION; MAIZE; DNA; MARKER
 RE

Referenced Author (RAU)	Year VOL PG	Referenced Work (RWK)
	(R PY) (R VL) (R PG)	
BOWER R	1996 2 239	MOL BREEDING
BOWER R	1992 2 409	PLANT J
CASAS A M	1993 90 11212	P NATL ACAD SCI USA
CASAS A M	1997 33 92	IN VITRO CELL DEV-PL
CHIU W L	1996 6 325	CURR BIOL
CHOWDHURY M K U	1997 16 277	PLANT CELL REP

CHRISTENSEN A H	1996 5 213 TRANSGENIC RES
CHRISTOU P	1991 9 957 BIO-TECHNOL
CORNEJO M J	1993 23 567 PLANT MOL BIOL
DANIELL H	1997 463 METHODS MOL BIOL REC
DEBLOCK M	1987 6 2513 EMBO J
DENNEHEY B K	1994 36 1 PLANT CELL TISS ORG
ELLIS J G	1987 6 11 EMBO J
FINER J J	1992 11 323 PLANT CELL REP
FRANKS T	1991 18 471 AUST J PLANT PHYSIOL
GAMBORG O L	1968 50 151 EXP CELL RES
GORDONKAMM W J	1990 2 603 PLANT CELL
HASELOFF J	1997 94 2122 P NATL ACAD SCI USA
HASELOFF J	1995 11 328 TRENDS GENET <--
HE D G	1994 14 192 PLANT CELL REP
HIEI Y	1994 6 271 PLANT J
HILL M	1995 85 119 EUPHYTICA <--
JEFFERSON R A	1987 6 3901 EMBO J
KIKKERT J R	1993 33 221 PLANT CELL TISS ORG
KNUTZON D S	1992 89 2624 P NATL ACAD SCI USA
KOHLER R H	1997 276 2039 SCIENCE
KOHLER R H	1997 11 613 PLANT J
KONONOWICZ A K	1995 3 171 AFR CROP SCI J <--
KOZIEL M G	1993 11 194 BIO-TECHNOL
LAST D I	1991 81 581 THEOR APPL GENET
LOMONOSOFF G P	1995 33 323 ANNU REV PHYTOPATHOL <--
MCELROY D	1991 231 150 MOL GEN GENET
MEEUSEN R L	1989 34 373 ANNU REV ENTOMOL
MURASHIGE T	1962 15 473 PHYSIOL PLANTARUM
ODELL J T	1985 313 810 NATURE
RATHUS C	1999 46 76 TRANSGENIC CROPS 1 B
RITALA A	1994 24 317 PLANT MOL BIOL
ROGERS S O	1985 5 69 PLANT MOL BIOL
ROSS A H	1995 43 192 AUST J BOT <--
SAMBROOK J	1989 MOL CLONING LAB MANU
SCHENK P M	1998 16 313 PLANT MOL BIOL REP
VAIN P	1993 33 237 PLANT CELL TISS ORG
VASIL V	1992 10 667 BIO-TECHNOL
WAN Y C	1994 104 37 PLANT PHYSIOL
ZHU H	1998 52 243 J GENET BREED

L13 ANSWER 4 OF 7 SCISEARCH COPYRIGHT 2003 THOMSON ISI

AN 1999:652529 SCISEARCH

GA The Genuine Article (R) Number: 227BB

TI A new **peroxidase** cDNA from white clover: Its characterization and expression in root tissue challenged with homologous rhizobia, heterologous rhizobia, or *Pseudomonas syringae*

AU Crockard M A (Reprint); Bjourson A J; Cooper J E

CS QUEENS UNIV BELFAST, DEPT APPL PLANT SCI, NEWFORGE LANE, BELFAST BT9 5PX, ANTRIM, NORTH IRELAND (Reprint)

CY A NORTH IRELAND

SO MOLECULAR PLANT-MICROBE INTERACTIONS, (SEP 1999) Vol. 12, No. 9, pp. 825-828.

Publisher: AMER PHYTOPATHOLOGICAL SOC, 3340 PILOT KNOB ROAD, ST PAUL, MN 55121.

ISSN: 0894-0282.

DT Article; Journal

FS LIFE; AGRI

LA English

REC Reference Count: 27

AB Temporal reverse transcription-polymerase chain reaction (RT-PCR) expression analyses were performed on *Trprx2*, a new white clover **peroxidase**, with roots challenged with homologous rhizobia, heterologous rhizobia, and a pathogen, *Pseudomonas syringae*. Low levels of

Trprx2 expression were evident in all rhizobial treatments but in P.syringae-treated clover background expression was dramatically reduced within 1 h and was undetectable in treatments inoculated for more than 3 h. Spraying 4 mM salicylic acid onto seedlings increased Trprx2 expression. These data suggest a defensive role for Trprx2 in white clover and indicate active defense suppression by the pathogen.

CC PLANT SCIENCES; BIOTECHNOLOGY & APPLIED MICROBIOLOGY; BIOCHEMISTRY & MOLECULAR BIOLOGY
 STP KeyWords Plus (R): SALICYLIC-ACID; MOLECULAR-CLONING; GENE; INFECTION; CELL; INDUCTION; SYMBIOSIS; MELIOTI; DEFENSE; ALFALFA
 RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	
ANDERSON M D	1998	47	555	PHYTOCHEMISTRY	
BAGA M	1995	29	647	PLANT MOL BIOL	<--
BARON C	1995	29	107	ANNU REV GENET	<--
BROWN I	1998	15	333	PLANT J	
BUFFARD D	1996	12	175	WORLD J MICROB BIOT	
CHITTOOR J M	1997	10	861	MOL PLANT MICROBE IN	
COOK D	1995	7	43	PLANT CELL	<--
CURTIS M D	1997	10	326	MOL PLANT MICROBE IN	
DELLEDONNE M	1998	394	585	NATURE	
DJORDJEVIC M A	1987	25	145	ANNU REV PHYTOPATHOL	
ELTURK J	1996	170	213	GENE	
FAHRAEUS G	1957	16	374	J GEN MICROBIOL	
GOORMAHTIG S	1995	8	1816	MOL PLANT MICROBE IN	<--
LAWSON C G R	1996	23	93	AUST J PLANT PHYSIOL	
LIANG P	1992	21	4272	SCIENCE	
MARTINEZABARCA F	1998	11	153	MOL PLANT MICROBE IN	
MAUCHMANI B	1998	82	535	ANN BOT-LONDON	
MITTLER R	1998	10	461	PLANT CELL	
PENG H M	1996	112	1437	PLANT PHYSIOL	
PEROTTO S	1994	7	99	MOL PLANT MICROBE IN	
ROSS A H	1995	110	95	PLANT SCI	<--
SALZWEDEL J L	1993	6	127	MOL PLANT MICROBE IN	
SAVOURÉ A	1994	13	1093	EMBO J	
SAVOURÉ A	1997	11	277	PLANT J	
SPAINK H P	1995	33	345	ANNU REV PHYTOPATHOL	<--
STAHELIN C	1992	187	295	PLANTA	
WELINDER K G	1993	1	35	PLANT PEROXIDASES BI	

L13 ANSWER 5 OF 7 SCISEARCH COPYRIGHT 2003 THOMSON ISI
 AN 97:608576 SCISEARCH
 GA The Genuine Article (R) Number: XQ342
 TI Microprojectile mediated plant transformation: A bibliographic search
 AU Luthra R (Reprint); Varsha; Dubey R K; Srivastava A K; Kumar S
 CS CENT INST MED & AROMAT PLANTS, CIMAP, PO CIMAP, LUCKNOW 226015, UTTAR
 PRADESH, INDIA (Reprint)
 CYA INDIA
 SO EUPHYTICA, (AUG 1997) Vol. 95, No. 3, pp. 269-294.
 Publisher: KLUWER ACADEMIC PUBL, SPUIBOULEVARD 50, PO BOX 17, 3300 AA
 DORDRECHT, NETHERLANDS.
 ISSN: 0014-2336.
 DT General Review; Journal
 FS AGRI
 LA English
 REC Reference Count: 191
 AB This bibliographic search covers the literature till December, 1995 on
 microprojectile mediated plant transformation, plasmid construct used, and
 the type of expression obtained, since the inception of the concept by
 Sanford et al., in 1987.
 CC PLANT SCIENCES; AGRICULTURE

ST Author Keywords: bibliography; microprojectile mediated plant transformation
 STP KeyWords Plus (R): TRANSIENT GENE-EXPRESSION; DISCHARGE PARTICLE-ACCELERATION; HIGH-VELOCITY MICROPROJECTILES; FERTILE TRANSGENIC WHEAT; BETA-GLUCURONIDASE GENE; SHOOT APICAL MERISTEMS; TOBACCO PLASTID GENOME; COATED GOLD PARTICLES; HELIANTHUS-ANNUUS L; MARIANA FOLLOWING MICROPROJECTION
 RF 95-3369 006; TRANSGENIC PLANTS; WOUND RESPONSE GENES IN TOMATO LEAVES; STABLE TRANSFORMATION; JASMONIC ACID; OCTADECANOID DEFENSE SIGNALING PATHWAY

RE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)
ALLEN G C	1993	5	603	PLANT CELL
ARAGAO F J L	1993	12	483	PLANT CELL REP
AROKIARAJ P	1994	13	425	PLANT CELL REP
BANSAL K C	1992	89	3654	P NATL ACAD SCI USA
BARCELO P	1994	5	583	PLANT J
BECKER D	1994	5	299	PLANT J
BIDNEY D	1992	18	301	PLANT MOL BIOL
BILANG R	1993	4	735	PLANT J
BOMMINENI V R	1994	45	491	J EXP BOT
BOMMINENI V R	1993	13	17	PLANT CELL REP
BRAR G S	1994	5	745	PLANT J
BROWN D C W	1994	37	47	PLANT CELL TISS ORG
BRUCE W B	1989	86	9692	P NATL ACAD SCI USA
BRUCE W B	1990	2	1081	PLANT CELL
BUISING C M	1994	243	71	MOL GEN GENET
CAO J	1992	11	586	PLANT CELL REP
CARRER H	1995	13	791	BIO-TECHNOL
CARRER H	1993	241	49	MOL GEN GENET
CASAS A M	1993	90	11212	P NATL ACAD SCI USA
CASTILLO A M	1994	12	1366	BIO-TECHNOL
CHAREST P J	1993	12	189	PLANT CELL REP
CHEN J L	1994	88	187	THEOR APPL GENET
CHIA T F	1994	6	441	PLANT J
CHIBBAR R N	1991	34	453	GENOME
CHIBBAR R N	1993	12	506	PLANT CELL REP
CHOWDHURY M K U	1992	11	494	PLANT CELL REP
CHRISTOU P	1990	66	379	ANN BOT-LONDON
CHRISTOU P	1995	75	407	ANN BOT-LONDON
CHRISTOU P	1995	75	449	ANN BOT-LONDON
CHRISTOU P	1991	9	957	BIO-TECHNOL
CHRISTOU P	1989	86	7500	P NATL ACAD SCI USA
CHRISTOU P	1988	87	671	PLANT PHYSIOL
CHRISTOU P	1990	79	337	THEOR APPL GENET
COOLEY J	1995	90	97	THEOR APPL GENET
CREISSEN G	1990	18	680	PLANT CELL REP
DANIELL H	1990	87	88	P NATL ACAD SCI USA
DANIELL H	1991	9	615	PLANT CELL REP
DEVANTIER Y A	1993	71	1458	CAN J BOT
DUCHESNE L C	1992	70	175	CAN J BOT
DUCHESNE L C	1991	10	191	PLANT CELL REP
DUPUIS I	1993	12	607	PLANT CELL REP
ECK J M V	1995	14	299	PLANT CELL REP
ELLIS D D	1993	11	84	BIO-TECHNOL
ELLIS D D	1991	17	19	PLANT MOL BIOL
FINER J J	1991	27	175	IN VITRO CELL DEV P
FINER J J	1990	8	586	PLANT CELL REP
FINER J J	1992	11	323	PLANT CELL REP
FITCH M M M	1992	10	1466	BIO-TECHNOL
FITCH M M M	1990	9	189	PLANT CELL REP

FRANCHE C	1991 17	493	PLANT MOL BIOL
FRANKS T	1991 18	471	AUST J PLANT PHYSIOL
FROMM M E	1990 8	833	BIO-TECHNOL
GALLOMEAGHER M	1993 12	666	PLANT CELL REP
GAMBLEY R L	1993 12	343	PLANT CELL REP
GENGA A	1991 45	129	J GENET BREED
GOFF S A	1990 9	2517	EMBO J
GOLDFARB B	1991 10	517	PLANT CELL REP
GORDONKAMM W J	1990 2	603	PLANT CELL
GRAY D J	1994 37	179	PLANT CELL TISS ORG
GUOLING N	1995 31	131	CELL DEV BIOL PLANT <--
HAGIO T	1991 10	260	PLANT CELL REP
HAGIO T	1995 14	329	PLANT CELL REP <--
HAMILTON D A	1992 18	211	PLANT MOL BIOL
HARTMAN C L	1994 12	919	BIO-TECHNOL
HARWOOD W A	1995 85	113	EUPHYTICA <--
HEBERT D	1993 12	585	PLANT CELL REP
HEIM U	1995 15	125	PLANT CELL REP <--
HENSGENS L A M	1993 22	1101	PLANT MOL BIOL
HILL M	1995 85	119	EUPHYTICA <--
HUNOLD R	1994 5	593	PLANT J
HUNOLD R	1995 105	95	PLANT SCI <--
IGLESIAS V A	1994 192	84	PLANTA
IIDA A	1990 33	560	APPL MICROBIOL BIOT
IIDA A	1995 14	539	PLANT CELL REP <--
IIDA A	1991 97	1585	PLANT PHYSIOL
IIDA A	1990 80	813	THEOR APPL GENET
JAHNE A	1994 89	525	THEOR APPL GENET
KAMO K	1995 110	105	PLANT SCI <--
KARTHA K K	1989 8	429	PLANT CELL REP
KAUSCH A P	1995 196	501	PLANTA <--
KING S P	1994 30	117	IN VITRO CELL DEV
KLEIN T M	1988 6	559	BIOTECHNOLOGY
KLEIN T M	1987 327	70	NATURE
KLEIN T M	1988 85	8502	P NATIONAL ACADEMY S
KLEIN T M	1988 85	4305	P NATL ACAD SCI USA
KLEIN T M	1989 91	440	PLANT PHYSIOL
KNITTEL N	1994 14	81	PLANT CELL REP
KOZIEL M G	1993 11	194	BIO-TECHNOL
KUEHNLE A R	1992 11	484	PLANT CELL REP
KUNDSEN S	1991 185	330	PLANTA
LAMBE P	1995 108	51	PLANT SCI <--
LAPARRA H	1995 85	63	EUPHYTICA <--
LI L C	1993 12	250	PLANT CELL REP
LI Y H	1994 13	661	PLANT CELL REP
LOEB T A	1994 104	81	PLANT SCI
LONSDALE D	1990 41	1161	J EXP BOT
LOWE K	1995 13	677	BIO-TECHNOL <--
MAHN A	1995 46	1625	J EXP BOT <--
MARTINUSSEN I	1994 92	412	PHYSIOL PLANTARUM
MARTINUSSEN I	1995 93	445	PHYSIOL PLANTARUM <--
MCCABE D E	1993 11	596	BIO-TECHNOL
MCCABE D E	1988 6	923	BIOTECHNOLOGY
MCCOWN B H	1991 9	590	PLANT CELL REP
MCELROY D	1991 231	150	MOL GEN GENET
MCELROY D	1990 2	163	PLANT CELL
MENDEL R R	1989 78	31	THEOR APPL GENET
MOORE P J	1994 13	556	PLANT CELL REP
MORIKAWA H	1989 31	320	APPL MICROBIOL BIOT
MURRY L E	1993 11	1559	BIO-TECHNOL
NEHRA N S	1994 5	285	PLANT J
NEWTON R J	1992 11	188	PLANT CELL REP
NISHIHARA M	1993 102	357	PLANT PHYSIOL

NISHIHARA M	1995 4	341	TRANSGENIC RES	<--
OARD J H	1990 92	334	PLANT PHYSIOL	
OZIASAKINS P	1993 93	185	PLANT SCI	
PEREIRA L F	1995 14	290	PLANT CELL REP	<--
PEREZVICENTE R	1993 142	610	J PLANT PHYSIOL	
PERL A	1992 235	279	MOL GEN GENET	
PRAKASH C S	1992 11	53	PLANT CELL REP	
RASMUSSEN J L	1994 13	212	PLANT CELL REP	
RATNAYAKA I J S	1995 14	794	PLANT CELL REP	<--
REGGIARDO M I	1991 75	237	PLANT SCI	
REGISTER J C	1994 25	951	PLANT MOL BIOL	
RITALA A	1995 85	81	EUPHYTICA	<--
RITALA A	1993 12	435	PLANT CELL REP	
RITALA A	1994 24	317	PLANT MOL BIOL	
ROBERTSON D	1992 19	925	PLANT MOL BIOL	
ROCHANGE F	1995 14	674	PLANT CELL REP	<--
ROSS A H	1995 43	193	AUST J BOT	<--
RUSSELL D A	1993 13	24	PLANT CELL REP	
RUSSELL D R	1993 12	165	PLANT CELL REP	
RUSSELL J A	1992 98	1050	PLANT PHYSIOL	
SAGI L	1995 13	481	BIO-TECHNOL	<--
SAGI L	1995 85	89	EUPHYTICA	<--
SATO S	1993 12	408	PLANT CELL REP	
SAUTTER C	1991 9	1080	BIO-TECHNOL	
SAUTTER C	1995 85	45	EUPHYTICA	<--
SCHAFFER H J	1995 28	205	PLANT MOL BIOL	<--
SCHNALL J A	1993 12	316	PLANT CELL REP	
SCHULZE J	1995 112	197	PLANT SCI	<--
SCORZA R	1995 14	589	PLANT CELL REP	<--
SEKI M	1991 36	228	APPL MICROBIOL BIOT	
SEKI M	1991 17	259	PLANT MOL BIOL	
SEMERIA L	1995 85	125	EUPHYTICA	<--
SERRES R	1992 117	174	J AM SOC HORTIC SCI	
SOMERS D A	1992 10	1589	BIO-TECHNOL	
SPANGENBERG G	1995 145	693	J PLANT PHYSIOL	<--
SPANGENBERG G	1995 108	209	PLANT SCI	<--
SPENCER T M	1990 79	625	THEOR APPL GENET	
STAUB J M	1993 12	601	EMBO J	
STAUB J M	1992 4	39	PLANT CELL	
STIFF C M	1995 40	243	PLANT CELL TISS ORG	<--
STOGER E	1995 14	273	PLANT CELL REP	<--
STOMP A M	1991 10	187	PLANT CELL REP	
SVAB Z	1990 87	8526	P NATL ACAD SCI USA	
TAGU D	1992 20	529	PLANT MOL BIOL	
TAKEUCHI Y	1992 18	835	PLANT MOL BIOL	
TAKUMI S	1994 103	161	PLANT SCI	
TANAKA T	1995 28	337	PLANT MOL BIOL	<--
TAYLOR M G	1991 10	120	PLANT CELL REP	
TAYLOR M G	1993 12	491	PLANT CELL REP	
TOMES D T	1990 14	261	PLANT MOL BIOL	
TOR M	1993 12	468	PLANT CELL REP	
TORBERT K A	1995 14	635	PLANT CELL REP	<--
TWELL D	1989 91	1270	PLANT PHYSIOL	
VAIN P	1993 12	84	PLANT CELL REP	
VANBOXTEL J	1995 14	748	PLANT CELL REP	<--
VANDERLEEDEPLEG.LM	1992 11	20	PLANT CELL REP	
VANDERLEEDEPLEG.LM	1995 4	77	TRANSGENIC RES	<--
VANDERMAAS H M	1994 24	401	PLANT MOL BIOL	
VASIL V	1991 9	743	BIO-TECHNOL	
VASIL V	1992 10	667	BIO-TECHNOL	
VASIL V	1993 11	1553	BIO-TECHNOL	
WALTER C	1994 14	69	PLANT CELL REP	
WALTERS D A	1992 18	189	PLANT MOL BIOL	

WAN Y	1995	196	7	PLANTA	<--
WAN Y C	1994	104	37	PLANT PHYSIOL	
WANG Y C	1988	11	433	PLANT MOL BIOL	
WARKENTIN T D	1992	87	171	PLANT SCI	
WEEKS J T	1993	102	1077	PLANT PHYSIOL	
WILDE H D	1992	98	114	PLANT PHYSIOL	
WILMINK A	1992	11	76	PLANT CELL REP	
YAMASHITA T	1991	97	829	PLANT PHYSIOL	
YAO J L	1996	113	175	PLANT SCI	
YE G N	1990	15	809	PLANT MOL BIOL	
YE X J	1994	119	367	J AM SOC HORTIC SCI	
YPEPES L M	1995	14	694	PLANT CELL REP	<--
ZHONG H	1993	13	1	PLANT CELL REP	
ZIMMY J	1995	11	155	MOL BREEDING	<--
ZOUBENKO O V	1994	22	3819	NUCLEIC ACIDS RES	
ZUKER A	1995	64	177	SCI HORTIC-AMSTERDAM	<--

L13 ANSWER 6 OF 7 SCISEARCH COPYRIGHT 2003 THOMSON ISI
 AN 97:453040 SCISEARCH
 GA The Genuine Article (R) Number: XD140
 TI Plant transformation: Problems and strategies for practical application
 AU Birch R G (Reprint)
 CS UNIV QUEENSLAND, DEPT BOT, BRISBANE, QLD 4072, AUSTRALIA (Reprint)
 CYA AUSTRALIA
 SO ANNUAL REVIEW OF PLANT PHYSIOLOGY AND PLANT MOLECULAR BIOLOGY, (MAY 1997)
 Vol. 48, pp. 297-326.
 Publisher: ANNUAL REVIEWS INC, 4139 EL CAMINO WAY, PO BOX 10139, PALO
 ALTO, CA 94303-0139.
 ISSN: 0066-4294.
 DT General Review; Journal
 FS LIFE; AGRI
 LA English
 REC Reference Count: 164
 AB Plant transformation is now a core research tool in plant biology and a practical tool for cultivar improvement. There are verified methods for stable introduction of novel genes into the nuclear genomes of over 120 diverse plant species. This review examines the criteria to verify plant transformation; the biological and practical requirements for transformation systems; the integration of tissue culture, gene transfer, selection, and transgene expression strategies to achieve transformation in recalcitrant species; and other constraints to plant transformation including regulatory environment, public perceptions, intellectual property, and economics. Because the costs of screening populations showing diverse genetic changes can far exceed the costs of transformation, it is important to distinguish absolute and useful transformation efficiencies. The major technical challenge facing plant transformation biology is the development of methods and constructs to produce a high proportion of plants showing predictable transgene expression without collateral genetic damage. This will require answers to a series of biological and technical questions, some of which are defined.
 CC PLANT SCIENCES; BIOCHEMISTRY & MOLECULAR BIOLOGY
 ST Author Keywords: plant improvement; gene transfer; transgenic plants; transgene expression; genetic engineering
 STP KeyWords Plus (R): TRANSGENIC TOBACCO PLANTS; MEDIATED GENE-TRANSFER; T-DNA; AGROBACTERIUM-TUMEFACIENS; MICROPROJECTILE BOMBARDMENT; FOREIGN GENES; INTELLECTUAL PROPERTY; PARTICLE BOMBARDMENT; MAIZE PLANTS; STABLE TRANSFORMATION
 RF 95-3369 002; TRANSGENIC PLANTS; WOUND RESPONSE GENES IN TOMATO LEAVES; STABLE TRANSFORMATION; JASMONIC ACID; OCTADECANOID DEFENSE SIGNALING PATHWAY
 95-2449 001; PLANT EMBRYOGENESIS; ARABIDOPSIS EMBRYO; ROOT APEX; CELL PATTERN; AXIS FORMATION
 RE

Referenced Author (RAU)	Year	VOL	PG	Referenced Work (RWK)	
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ANON	1993	4	253	CURR OPIN BIOTECH	
AITKEN C J	1995			AUTOMATION ENV CONTR	<--
ALBERT H	1995	7	649	PLANT J	<--
AN G H	1989	1	115	PLANT CELL	
ARDLEY J	1996	14	67	TRENDS BIOTECHNOL	
BAKER B F	1993		37	ANTISENSE RES APPL	
BARKS A H	1994	12	352	TRENDS BIOTECHNOL	
BECHTOLD N	1993	316	1194	CR ACAD SCI III-VIE	
BENEDIKTSSON I	1995	85	53	EUPHYTICA	<--
BENFEY P N	1990	9	1685	EMBO J	
BENNETT J	1993	15	165	GENETIC ENG	
BIDNEY D	1992	18	301	PLANT MOL BIOL	
BIRCH R G	1991	18	453	AUST J PLANT PHYSIOL	
BIRCH R G	1996	2	368	P INT SOC SUG TECHN	
BIRCH R G	1994		3	PARTICLE BOMBARDMENT	
BOURQUE J E	1995	105	125	PLANT SCI	<--
BOWER R	1996	2	239	MOL BREEDING	
BOWER R	1992	2	409	PLANT J	
BOWERING N	1993	1	89	ST VAC ULTRAV XRAY P	
BUISING C M	1994	243	71	MOL GEN GENET	
CAO J	1992	11	586	PLANT CELL REP	
CARRER H	1995	13	791	BIO-TECHNOL	<--
CASKEY C T	1996	14	298	TRENDS BIOTECHNOL	
CHANG S S	1994	5	551	PLANT J	
CHOW M	1992	4	629	CURR OPIN CELL BIOL	
CHRISTOU P	1995	85	13	EUPHYTICA	<--
CHRISTOU P	1992	2	275	PLANT J	
CHRISTOU P	1992	2	283	PLANT J	
CHRISTOU P	1992	10	239	TRENDS BIOTECHNOL	
COLLINS G B	1996	792		ANN NY ACAD SCI	
CORUZZI G	1994			PLANT MOL BIOL MOL G	
DALE E C	1991	88	10558	P NATL ACAD SCI USA	
DALE P J	1995	13	398	TRENDS BIOTECHNOL	<--
DEBLOCK M	1984	3	1681	EMBO J	
DEBLOCK M	1993	71	1	EUPHYTICA	
DEBLOCK M	1989	91	694	PLANT PHYSIOL	
DEBLOCK M	1995	197	619	PLANTA	<--
DELOOSE M	1995	85	209	EUPHYTICA	<--
DRAPER J	1988			PLANT GENETIC TRANSF	
ELLIS J R	1993		253	PLANT MOL BIOL LABFA	
ENAYATI E	1995	13	460	BIO-TECHNOL	<--
ENGEL K H	1995			GENETICALLY MODIFIED	<--
FELDMANN K A	1991	1	71	PLANT J	
FINNEGAN J	1994	12	1883	BIOTECHNOLOGY	
FIREK S	1994	3	326	TRANSGENIC RES	
FRANKS T	1991		103	ADV METHODS PLANT. BR	
FROMM M E	1990	8	1833	BIO-TECHNOL	
GAD A E	1990	79	177	PHYSIOL PLANTARUM	
GAFNI Y	1995	20	98	LETT APPL MICROBIOL	<--
GAMBLEY R L	1994	21	603	AUST J PLANT PHYSIOL	
GAMBORG O L	1995			PLANT CELL TISSUE OR	<--
GARTLAND K M A	1995	44		AGROBACTERIUM PROTOC	<--
GATEHOUSE A M R	1992			PLANT GENETIC MANIPU	
GEBALLE A P	1994	19	159	TRENDS BIOCHEM SCI	
GIL P	1996	15	1678	EMBO J	
GLICK B R	1993			METHODS PLANT MOL BI	
GOMORD V	1996	34	165	PLANT PHYSIOL BIOCH	
GRANT J E	1991		50	ADV METHODS PLANT BR	
GREVELDING C	1993	23	847	PLANT MOL BIOL	
GRIERSON D	1991			PLANT GENETIC ENG	

HADI M Z	1996 15	500	PLANT CELL REP	
HALLMAN W K	1996 14	35	BIOTECHNOLOGY	
HAMILTON C M	1996 93	9975	P NATL ACAD SCI USA	<--
HAQ T A	1995 268	714	SCIENCE	
HENSGENS L A M	1992 20	921	PLANT MOL BIOL	
HERBERS K	1996 14	19	TRENDS BIOTECHNOL	
HICKS G R	1995 107	1055	PLANT PHYSIOL	<--
HIEI Y	1994 6	271	PLANT J	
HINCHEE M A W	1993 1	243	TRANSGENIC PLANTS	
HOOKAAS P J J	1992 19	15	PLANT MOL BIOL	
HORSCH R B	1993 342	287	PHILOS T ROY SOC B	
HORSCH R B	1984 223	496	SCIENCE	
HOYLE R	1996 14	680	NAT BIOTECHNOL	
ISHIDA Y	1996 14	745	NAT BIOTECHNOL	
JAHNE A	1995 85	35	EUPHYTICA	<--
JANSSEN B J	1989 14	61	PLANT MOL BIOL	
JASIN M	1996 93	8804	P NATL ACAD SCI USA	
JENES B	1993 1	125	TRANSGENIC PLANTS	
KARP A	1995 85	295	EUPHYTICA	<--
KEEGSTRA K	1995 93	157	PHYSIOL PLANTARUM	<--
KIM J W	1996 117	131	PLANT SCI	
KJELDGAARD R H	1994 6	1524	PLANT CELL	
KLEIN B	1990	79	PROGR PLANT CELLULAR	
KONCZ C	1989 86	8467	P NATL ACAD SCI USA	
KOZIEL M G	1993 11	194	BIO-TECHNOL	
KOZIEL M G	1996	164	ENG PLANTS COMMERCIA	
KUNG S	1993 1		TRANSGENIC PLANTS	
LAPARRA H	1995 85	63	EUPHYTICA	<--
LEBEL E G	1995 91	899	THEOR APPL GENET	<--
LI H Q	1996 14	736	NAT BIOTECHNOL	
LICHENSTEIN M	1994 76	913	CELL	
LIN J J	1995 109	171	PLANT SCI	<--
LINDSEY K	1993 2	33	TRANSGENIC RES	
LIVINGSTONE D M	1995 22	585	AUST J PLANT PHYSIOL	<--
LUEHRSEN K R	1991 225	81	MOL GEN GENET	
LUEHRSEN K R	1994 13	454	PLANT CELL REP	
MAAS C	1991 16	199	PLANT MOL BIOL	
MAHESWARAN G	1992 139	560	J PLANT PHYSIOL	
MATZKE M A	1995 107	679	PLANT PHYSIOL	<--
MCBRIDE K E	1995 13	362	BIO-TECHNOL	<--
MCCABE D E	1993 11	596	BIO-TECHNOL	
MCELROY D	1996 14	715	NAT BIOTECHNOL	
MEYER P	1995 85	359	EUPHYTICA	<--
MILLER H I	1995 13	123	TRENDS BIOTECHNOL	<--
MOL J N M	1995 13	350	TRENDS BIOTECHNOL	<--
MURRAY D R	1991		ADV METHODS PLANT BR	
NARASIMHULU S B	1996 8	873	PLANT CELL	
NAWRATH C	1995 1	105	MOL BREEDING	<--
NEGRUTIU I	1990 79	197	PHYSIOL PLANTARUM	
NEUHAUS G	1990 79	213	PHYSIOL PLANTARUM	
NEUHAUS J M	1996 34	217	PLANT PHYSIOL BIOCH	
NEWBIGGIN E	1995 13	338	TRENDS BIOTECHNOL	<--
PALMGREN G	1993 21	429	PLANT MOL BIOL	
PASZKOWSKI J	1984 3	2717	EMBO J	
PASZKOWSKI J	1994		HOMOLOGOUS RECOMBINA	
PEACH C	1991 17	49	PLANT MOL BIOL	
PEET R C	1995		PROTECTION PLANT REL	<--
PERI A	1996 14	624	NAT BIOTECHNOL	
PERLAK F J	1991 88	13324	P NATL ACAD SCI USA	
POTRYKUS I	1991 42	205	ANNU REV PLANT PHYS	
POTRYKUS I	1995		GENE TRANSFER PLANTS	<--
REICHEL C	1996 93	15888	P NATL ACAD SCI USA	
RICHARDSON J P	1993 28	1	CRIT REV BIOCHEM MOL	

RITCHIE S W	1993	1	147	TRANSGENIC PLANTS	
ROSS A H	1995	43	193	AUST J BOT	<--
RUSSELL D R	1993	12	165	PLANT CELL REP	
SCHOPKE C	1996	14	731	NAT BIOTECHNOL	
SHAH D M	1995	13	362	TRENDS BIOTECHNOL	<--
SHEN W H	1994	5	227	PLANT J	
SHIMAMOTO K	1989	338	274	NATURE	
SONGSTAD D D	1995	40	1	PLANT CELL TISS ORG	<--
SPIKER S	1996	110	15	PLANT PHYSIOL	
STASKAWICZ B J	1995	268	661	SCIENCE	<--
STONE R	1995	268	656	SCIENCE	<--
SUN S S M	1990	1	339	TRANSGENIC PLANTS	
TEPFER D	1990	79	140	PHYSIOL PLANTARUM	
THEOLOGIS A	1994	5	152	CURR OPIN BIOTECH	
TURNER R	1995	3	225	MOL BIOTECHNOL	<--
VANCANNEYT G	1990	220	245	MOL GEN GENET	
VANDERGRAAFF E	1996	31	677	PLANT MOL BIOL	
VANDERHOEVEN C	1994	3	159	TRANSGENIC RES	
VANWORDRAGEN M F	1992	10	12	PLANT MOL BIOL REP	
VARNER J E	1995		79	METHODS PLANT MOL BI	<--
VASIL I K	1994			PLANT CELL TISSUE CU	
VONBODMAN S B	1995	13	587	BIO-TECHNOL	<--
WALDEN R	1995	13	324	TRENDS BIOTECHNOL	<--
WAN Y C	1994	104	37	PLANT PHYSIOL	
WEBBER G D	1995			BIOTECHNOLOGY INFORM	<--
WEEKS J T	1993	102	1077	PLANT PHYSIOL	
WILLIAMS K M	1994	12	297	BIO-TECHNOL	
WILMINK A	1993	11	165	PLANT MOL BIOL REP	
WU L	1995	8	323	PLANT J	<--
YODER J I	1994	12	883	BIOTECHNOLOGY	
ZADOKS J C	1979		331	EPIDEMIOLOGY PLANT D	
ZUPAN J R	1995	107	1041	PLANT PHYSIOL	<--

STN Patent No. (RPN)	Year (RPY)	Ref. Inventor/Assignee (RIN)	Type	Ref. Patent No. (RPN)
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AT 621561	1992	SANFORD J C		AU 621561
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US 5451513	1995	MALIGA P		US 5451513
US 5453367	1995	PASZKOWSKI J		US 5453367
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US 5472869	1995	KRYZYZEK R		US 5472869
WO 9400977	1994	HIEI Y		WO 9400977

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AN 97:270014 SCISEARCH

GA The Genuine Article (R) Number: WQ788

TI A **peroxidase** gene promoter induced by phytopathogens and methyl jasmonate in transgenic plants

AU Curtis M D; Rae A L; Rusu A G; Harrison S J; Manners J M (Reprint)

CS UNIV QUEENSLAND, COOPERAT RES CTR TROP PLANT PATHOL, JOHN HINES BLDG, BRISBANE, QLD 4072, AUSTRALIA (Reprint); UNIV QUEENSLAND, COOPERAT RES CTR TROP PLANT PATHOL, BRISBANE, QLD 4072, AUSTRALIA; CSIRO, DIV TROP AGR, CUNNINGHAM LAB, ST LUCIA, QLD 4067, AUSTRALIA

CYA AUSTRALIA

SO MOLECULAR PLANT-MICROBE INTERACTIONS, (APR 1997) Vol. 10, No. 3, pp. 326-338.

Publisher: AMER PHYTOPATHOLOGICAL SOC, 3340 PILOT KNOB ROAD, ST PAUL, MN 55121.

ISSN: 0894-0282.

DT Article; Journal

FS LIFE; AGRI
 LA English
 REC Reference Count: 57
 AB The expression of two closely related **peroxidase** isogenes, Shpx6a and Shpx6b, of the legume *Stylosanthes humilis* was studied using isogene-specific reverse transcriptase PCR techniques. Results indicated that transcripts of both genes were rapidly induced following inoculation with the fungal pathogen *Colletotrichum gloeosporioides*, wounding and treatment with the defense regulator methyl jasmonate (MeJA). In contrast, treatment of leaves of *S. humilis* with abscisic acid (ABA) and salicylic acid (SA) did not induce transcripts of either isogene. A genomic clone containing the Shpx6b gene was isolated and 594 bp of 5' sequence upstream of the translation start was fused in frame to the coding region of the uidA reporter gene and introduced into tobacco. Expression from the Shpx6b promoter in transgenic plants was determined by histochemical staining and quantitative assays of beta-glucuronidase (GUS). In transgenic tobacco, GUS expression was detected in cotyledons, vascular cells of young leaves, anthers, pollen, and the stigma and style. Wounding of the tobacco plants produced very localized GUS staining. Much more extensive staining for GUS was observed following inoculation of tobacco leaves with conidia of the fungal pathogen *Cercospora nicotianae* and the inoculation of wound sites with mycelium of the Oomycete pathogen *Phytophthora parasitica* var. *nicotianae*. Treatment of mature leaves with methyl jasmonate induced GUS activity while treatment with ABA, SA, and H₂O₂ had no effect. A similar strong induction of GUS activity was measured in young transgenic seedlings germinated on MeJA while some, but much weaker, induction of GUS activity was observed in seedlings treated with SA. The sequence of the promoter contained motifs homologous to putative cis elements in other plant genes responsive to MeJA. The Shpx6b gene is the first plant **peroxidase** gene shown to be induced by both microbial pathogens and MeJA and its promoter will be useful for investigations of signaling processes during fungal infection and for the expression of foreign gene products at infection sites.
 CC PLANT SCIENCES; BIOTECHNOLOGY & APPLIED MICROBIOLOGY; BIOCHEMISTRY & MOLECULAR BIOLOGY
 ST Author Keywords: Nicotiana tabacum
 STP KeyWords Plus (R): PATHOGENESIS-RELATED PROTEIN-1A; LEGUME STYLOSANTHES HUMILIS; RNA-POLYMERASE-II; F-SP HORDEI; COLLETOTRICHUM-GLOEOSPORIOIDES; ERYSIPHE-GRAMINIS; MESSENGER-RNAS; 2,6-DICHLOROISONICOTINIC ACID; ACQUIRED-RESISTANCE; SALICYLIC-ACID
 RF 95-3369 003; TRANSGENIC PLANTS; WOUND RESPONSE GENES IN TOMATO LEAVES; STABLE TRANSFORMATION; JASMONIC ACID; OCTADECANOID DEFENSE SIGNALING PATHWAY
 95-2613 002; LIGHT-REGULATED EXPRESSION IN TRANSGENIC TOBACCO; GENES ENCODING HMG-COA REDUCTASE; PROMOTER ELEMENTS
 95-1130 001; SALICYLIC-ACID SIGNAL IN PLANT DEFENSE RESPONSES; SYSTEMIC ACCUMULATION OF PATHOGENESIS-RELATED PROTEINS; HYPERSENSITIVE DISEASE RESISTANCE; ACTIVE OXYGEN
 95-3190 001; INCREASED ABUNDANCE OF SPECIFIC SKELETAL-MUSCLE PROTEIN-TYROSINE PHOSPHATASES; ALPHA-B-CRYSTALLIN EXPRESSION
 95-3260 001; ABCISIC-ACID RESPONSE ELEMENTS; STRESS PROTEINS; GENE IN ARABIDOPSIS-THALIANA; DIFFERENTIAL EXPRESSION; POTENTIAL REGULATION; DESICCATION TOLERANCE
 95-5061 001; STRUCTURAL GENE; GLTC-DEPENDENT REGULATION OF BACILLUS-SUBTILIS GLUTAMATE SYNTHASE EXPRESSION; ARABIDOPSIS TYPE-1 PROTEIN PHOSPHATASE
 95-6027 001; SOMATIC EMBRYOGENESIS; CELL-SUSPENSION CULTURES; MULTIPLE SHOOT REGENERATION
 95-7181 001; EXPRESSION OF THE ARABIDOPSIS-THALIANA ACONITASE GENE; RICE CDNA SEQUENCES ENCODING PUTATIVE CALCIUM-DEPENDENT PROTEIN-KINASES

RE
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BARON C	1995 29	107	ANNU REV GENET	<--	
BRADFORD M M	1976 72	248	ANAL BIOCHEM		
BRADLEY D J	1992 70	21	CELL		
COOK D	1995 7	43	PLANT CELL	<--	
CORNELISSEN B J C	1986 5	37	EMBO J		
CREELMAN R A	1992 89	4938	P NATL ACAD SCI USA		
CURTIS M D	1995 108	1303	PLANT PHYSIOL	<--	
DURNER J	1995 92	11312	P NATL ACAD SCI USA	<--	
EPPLE P	1995 109	813	PLANT PHYSIOL	<--	
FARMER E E	1990 87	7713	P NATL ACAD SCI USA		
FARMER E E	1992 4	129	PLANT CELL		
GEBALLE A P	1994 19	159	TRENDS BIOCHEM SCI		
HARRISON S J	1995 8	398	MOL PLANT MICROBE IN	<--	
HINDMANN T	1992 4	1157	PLANT CELL		
HORSCH R B	1985 227	1227	SCIENCE		
IRVING H R	1990 37	355	PHYSIOL MOL PLANT P		
IRWIN J A G	1984 32	631	AUST J BOT		
JEFFERSON R A	1987 6	3901	EMBO J		
JEFFERSON R A	1987 5	387	PLANT MOL BIOL REPOR		
JONES G L	1995 99	567	MYCOL RES	<--	
JOSHI C P	1987 15	6643	NUCLEIC ACIDS RES		
KAWAOKA A	1994 6	87	PLANT J		
KEANE P J	1988 17	37	AUSTRALAS PLANT PATH		
KERBY K	1989 35	323	PHYSIOL MOL PLANT P		
KIM S R	1992 99	627	PLANT PHYSIOL		
KOBAYASHI A	1994 49	411	Z NATURFORSCH C		
LAZO G R	1991 9	963	BIOTECHNOLOGY		
MANNERS J M	1985 26	297	PHYSIOL PLANT PATHOL		
MASON H S	1993 5	241	PLANT CELL		
MEYER A	1984 3	1	J PLANT GROWTH REGUL		
MORRIS D R	1993 32	2931	BIOCHEMISTRY-US		
MURASHIGE T	1962 15	473	PHYSL PLANTARUM		
NAGEL R	1990 67	325	FEMS MICROBIOL LETT		
OGLE H J	1990 80	837	PHYTOPATHOLOGY		
PENG M	1992 82	696	PHYTOPATHOLOGY		
PENNINCKX I A M	1996 8	2309	PLANT CELL		
REINBOTHE S	1992 86	49	PHYSIOL PLANTARUM		
ROBIN C	1994 22	159	NEW ZEAL J CROP HORT		
ROSS A H	1995 110	95	PLANT SCI	<--	
RYALS J	1994 104	1109	PLANT PHYSIOL		
SAMBROOK J	1989		MOL CLONING LABORATO		
SCHINDLER U	1992 11	1261	EMBO J		
SEMBDNER G	1993 44	569	ANN REV PLANT PHYSL		
SHERF B A	1993 101	201	PLANT PHYSIOL		
STAIGER D	1989 86	6930	P NATL ACAD SCI USA		
THORDALCHRISTEN.H	1992 40	395	PHYSIOL MOL PLANT P		
TYSON H	1992 84	643	THEOR APPL GENET		
UKNES S	1992 4	645	PLANT CELL		
UKNES S	1993 5	159	PLANT CELL		
VERNOOIJ B	1995 8	228	MOL PLANT MICROBE IN	<--	
WALTER M H	1992	327	GENES INVOLVED PLANT		
WEIS L	1992 6	3300	FASEB J		
WILLIAMS M E	1992 4	485	PLANT CELL		
XU Y	1994 6	1077	PLANT CELL		
YE X S	1990 36	523	PHYSIOL MOL PLANT P		
ZHU Q	1994 12	1807	BIO-TECHNOL		